

ORIGINAL

BEFORE THE ARIZONA CORPORATION CO



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COMMISSIONERS

TOM FORESE, Chairman  
BOB BURNS  
DOUG LITTLE  
ANDY TOBIN  
BOYD W. DUNN

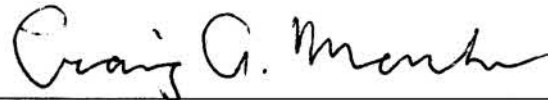
IN THE MATTER OF THE APPLICATION OF  
ARIZONA PUBLIC SERVICE COMPANY FOR  
A HEARING TO DETERMINE THE FAIR  
VALUE OF THE UTILITY PROPERTY OF APS  
FOR RATEMAKING PURPOSES, TO FIX A  
JUST AND REASONABLE RATE OF RETURN  
THEREON, TO APPROVE RATE SCHEDULES  
DESIGNED TO DEVELOP SUCH RETURN.

DOCKET NO. E-01345A-16-0036  
E-01345A-16-0123  
AURA'S NOTICE OF FILING -

RATE DESIGN TESTIMONIES OF  
PATRICK J. QUINN AND  
SCOTT RUBIN

1 The Arizona Utility Ratepayer Alliance, ("AURA") hereby files the attached rate-design  
2 testimonies of Patrick J. Quinn and Scott Rubin.

3 **Respectfully submitted** on February 3, 2017, by:

4 

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16 **Original** and 13 copies **filed**  
17 on February 3, 2017, with:

18  
19 Docket Control  
20 Arizona Corporation Commission  
21 1200 West Washington  
22 Phoenix, Arizona 85007  
23

24 **Copies mailed or emailed**  
25 on February 3, 2017, to:

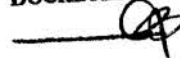
26  
27 **Service List**

Arizona Corporation Commission

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BEFORE THE ARIZONA CORPORATION COMMISSION

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TOM FORESE, Chairman  
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DOCKET NO. E-01345A-16-0123

**DIRECT TESTIMONY  
OF  
PATRICK J. QUINN  
ON BEHALF OF  
ARIZONA UTILITY RATEPAYER ALLIANCE  
CONCERNING RATE DESIGN**

**FEBRUARY 3, 2017**



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1 **EXECUTIVE SUMMARY**

2 The Arizona Utility Ratepayer Alliance sponsors the testimony of Patrick J. Quinn.

3 Mr. Quinn first discusses APS's proposal to increase its basic service charges, a fixed charge to  
4 customers. These charges place a burden on low income, low users and fixed-income customers  
5 since there is no way for a customer to reduce them. These charges occur whether the customer  
6 uses electricity or not. Mr. Quinn concludes that there should be no increase in basic service  
7 charges.

8 Mr. Quinn next discusses APS's proposal to impose mandatory demand charges on residential  
9 customers. Mr. Quinn explains how demand charges work. He explains that APS's proposal  
10 would be unprecedented and that similar proposals have been recently rejected in other states.

11 Mr. Quinn turns next to the real-world problems of mandatory demand charges. They

- 12 1. Are difficult to manage;
- 13 2. Are confusing to customers; and
- 14 3. Result in unintended consequences.

15 Demand charges are difficult to manage because customers would not be able to access and  
16 understand the necessary data and because of the lengthy time period during which demand  
17 could be measured.

18 Demand charges would be confusing because a third charge will be added, introducing greater  
19 volatility into the monthly bill with little that a customer can do to control it. It would be  
20 difficult to manage which appliances can be run at the same time and at what hour of the day.  
21 There would be no remedies if a customer gets a large unexpected demand charge. Customer  
22 confusion is real and supported by APS's own customer surveys.

23 Demand charges would result in unintended consequences including: Large bills; Surprise bills;  
24 Financial burden on fixed income, lower users; Requiring a change in lifestyles to manage  
25 charges; Extreme increases in many customers bills; and Frustration.

26 Mr. Quinn next critiques APS's "shift, stagger, and save" suggestions to reduce demand charges.  
27 He does not believe it would be adequate. The underlying data, knowledge, equipment and time  
28 to manage demand charges is more than shifting appliance usage, not running major appliances  
29 at the same time, and turning off fans when you leave a room. It requires a customer to devote  
30 considerable time and effort to manage the demand of all family members and guests for 100  
31 hours of every month. Companies can control their demand and related charges because they  
32 buy equipment and hire people to manage their demands; residential consumers don't have that  
33 luxury.

34 Finally, Mr. Quinn discusses APS's proposed customer outreach program. He testifies that it is  
35 inadequate to support such a radical change to customer rate design.

**I INTRODUCTION**

**Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND TELEPHONE NUMBER.**

A. My name is Patrick J Quinn. My business address is 5521 E. Cholla St. Scottsdale, AZ 85254, and my phone number is 602 579-1934.

**Q. PLEASE SUMMARIZE YOUR EDUCATION AND WORK EXPERIENCE?**

A. I have a BS in Mathematics and a MBA from the University of South Dakota. Additionally, I have almost 40 years' experience in the Telecommunications Industry and I currently run a consulting business dealing with utility regulation. I also served as the Director of the Residential Utility Consumer Office from January of 2013 until February of 2015.

**Q. WHAT EXPERIENCE DO YOU HAVE IN BEING A CONSUMER ADVOCATE?**

A. For many 30+ years I worked for Qwest and its predecessor companies, the last several years as President of Qwest Arizona. In that position I interacted with consumers on almost a daily basis. It was paramount that solving consumer issues required me to see issues from their point of view. After my retirement, Governor Brewer appointed me to be the Director of the Residential Utility Consumer Office (RUCO). My job there was to represent the residential ratepayers in front of the Arizona Corporation Commission in rate cases and other utility related filings. In this job, I had extensive meetings with consumer and advocacy groups such as AARP, HOAs like Sun City, Sun City West, Anthem, Verrado and other organizations representing low income and other targeted residential groups. Based on my work both at Qwest and RUCO I saw that consumer advocacy, still needs a lot of work and more outreach. I believe I have a unique background that leads to being an effective consumer advocate. I continue my relationships and work with groups representing residential consumers, speaking

1 specifically on the ills of demand charges in front of groups, including AARP, Sun City  
2 communities, HOAs and other large and small groups of residential consumers. In 2015,  
3 I established the Arizona Utility Ratepayer Alliance (AURA) organization to continue to  
4 represent residential customers in Electric Utility rate cases, mostly in the area of rate  
5 design. Since that time AURA has intervened in the UNSE rate case Docket No. E-  
6 04204A-15-0142, the TEP rates case Docket No.E-01933A-15-0322, the Value and Cost  
7 of DG Docket No. E-00000J-14-0023 and the APS rate case Docket No. E-01345A-16-  
8 0036. I filed testimony typically pertaining to demand charges and related issues in the  
9 UNSE and APS dockets and additionally not as AURA in the TriCo rate case Docket No.  
10 E-01461A-15-0363.

11 **II PURPOSE OF TESTIMONY**

12 **Q. WHAT IS THE PURPOSE OF AURA'S TESTIMONY IN THIS DOCKET?**

13 A. AURA, through my testimony and that of Scott Rubin, will address the residential  
14 customers' rate design issues in this case. We oppose APS's proposals to increases the  
15 basic service charges and to impose mandatory demand charges on any residential  
16 customer. Customers should have choices of different rate plans so they can choose the  
17 best rate for their lifestyle and usage, and not as dictated by APS. These plans should at a  
18 minimum include a traditional 2-part rate design with a basic service charge and a usage  
19 charge, a 2-part rate design with a time of use (TOU) higher per kWh prices for high  
20 usage times, and a voluntary 3-part rate design with a base service charge, usage charge  
21 and a demand charge.

22 **Q. WHAT SPECIFIC ISSUES ARE YOU ADDRESSING IN YOUR TESTIMONY?**

23 A. I discuss the problems and unintended consequences of mandatory demand charges, and  
24 give examples of my own personal and other customers experience with demand charges.  
25 Additionally, I will refute APS's over-simplification of managing demand charges as

described in the "Shift, Stagger and Save" portion of APS' Residential Customer Outreach and Rate Transition Plan, including the shortcomings of total plan.

**Q. WHAT WILL SCOTT RUBIN BE ADDRESSING IN HIS TESTIMONY?**

A. He will describe the results of models and analysis he performed using APS data for almost a million of their customers. APS has provided no studies to justify their proposed three-part rate design. Mr. Rubin shows that APS's proposed use of mandatory demand charges is less effective than simple percentage increases based on the existing rate design. Furthermore, some customers will see large increases and some will see large decreases, which doesn't move customer or APS any closer to matching individual cost causers with revenue recovery. Instead APS only shifts who is ultimately being subsidizing and who is providing those subsidies.

**Q. DID YOU FILE TESTIMONY IN THE REVENUE REQUIREMENT AND RATE OF RETURN PART OF THIS CASE?**

A. No. However; based on the fact that APS's parent company Pinnacle West had both record earnings and stock price in the last 2 years, and paid their top 5 executives almost \$17 million in total compensation in 2015, I believe that the Arizona Corporation Commission Staff (Staff) and the Residential Utility Consumer Office (RUCO) are correct in recommending that APS not receive an increase in its revenue requirement.

**III THE COMMISSION SHOULD REJECT APS'S PROPOSED INCREASE IN THE BASIC SERVICE CHARGE**

**Q. WHAT ARE YOUR CONCERNS WITH THE BASIC SERVICE CHARGE INCREASES?**

A. Higher basic service charges, which are a fixed charge to customers, place a burden on low income, low users and fixed-income customers since there is no way for a customer

1 to reduce them. These charges occur whether the customer uses electricity or not. The  
2 Staff and RUCO understand the customer concerns with high basic service charges and  
3 recommend no increases. There should be no increase in basic service charges.

4 **IV THE COMMISSION SHOULD REJECT APS'S PROPOSED MANDATORY**  
5 **RESIDENTIAL DEMAND CHARGES**

6 **Q. HOW WOULD MANDATORY DEMAND CHARGES WORK IN THIS CASE?**

7 A. Mandatory demand charges, as proposed by APS for this case, are based on a customer's  
8 one hour of peak usage Monday through Friday (excluding holidays) during the time  
9 period between 3pm and 8pm. About 100 hours each month on average would fall  
10 between these time periods. During those 100 hours, the one hour in which a customer  
11 uses the most electricity will be multiplied by the demand rate to determine the  
12 customer's mandatory demand charge for the month. Depending on the plan, the charge  
13 would range from \$6.60 to \$16.40 per kW.

14 **Q. COULD YOU PROVIDE AN EXAMPLE OF HOW THE DEMAND CHARGE**  
15 **WOULD WORK?**

16 A. Certainly. Let's use the \$6.60 rate as an example. So if on the first Tuesday of the month  
17 from 5pm to 6pm a customer used 10 kWh the demand charge would be 10kWh x one  
18 hour x \$6.60, which equals \$66.00. It wouldn't matter that for each of the other 99 hours  
19 in the month the customer used less than 10kWh or for that matter no electricity. The bill  
20 for that month would include a \$24 basic service charge, a mandatory demand charge of  
21 \$66.00 and a usage charge based on the total number of kWh used for the month  
22 including the 10 kWh used to calculate the demand charge. The usage charge ranges  
23 from \$0.15 to \$0.08 per kWh depending on time of day. These numbers come from APS  
24 Rate Schedule R-1 (See PJQ-1).



1 **Q. HAVE DEMAND CHARGES BEEN APPROVED BY A REGULATORY**  
2 **AGENCY FOR ANY INVESTOR OWNED UTILITIES IN ANY OTHER**  
3 **STATES?**

4 A. Not to my knowledge, but there have been several attempts in other states. In Illinois  
5 Exelon/ComEd ("ComEd") proposed mandatory demand charges in an energy bill at the  
6 legislature. In a memo to the Governor, his policy advisor on energy and environment  
7 wrote: "*These are not demand rates, these are insane rates – and they should be*  
8 *rejected.*" After a meeting with the Governor, ComEd pulled demand charges from the  
9 bill. The memo and an article on ComEd pulling demand charges can be found at the  
10 following links:

- 11 • [http://capitolfax.com/2016/11/21/rauner-administration-rejects-key-components-of-](http://capitolfax.com/2016/11/21/rauner-administration-rejects-key-components-of-exeloncomed-bill/)  
12 [exeloncomed-bill/](http://capitolfax.com/2016/11/21/rauner-administration-rejects-key-components-of-exeloncomed-bill/)
- 13 • [https://www.greentechmedia.com/articles/read/comed-strips-mandatory-demand-](https://www.greentechmedia.com/articles/read/comed-strips-mandatory-demand-charges-from-illinois-energy-bill)  
14 [charges-from-illinois-energy-bill](https://www.greentechmedia.com/articles/read/comed-strips-mandatory-demand-charges-from-illinois-energy-bill)

15 In Glasgow, Kentucky, the city-run power company implemented mandatory demand  
16 charges last year. Because of the outcry by residential customers over how it affected  
17 their lifestyles, and involvement by the state attorney general (who asked Kentucky  
18 federal legislators to get involved and called demand charges "an unfair burden"), the  
19 city-owned electric company came up with an alternative option to demand charges.

20 Articles can be found on the following link:

21 [http://www.glasgowdailytimes.com/news/beshear-requests-help-from-federal-legislators-](http://www.glasgowdailytimes.com/news/beshear-requests-help-from-federal-legislators-on-epb-rate-issue/article_736e638e-5b6b-11e6-86fe-bb58544a8e93.html)  
22 [on-epb-rate-issue/article\\_736e638e-5b6b-11e6-86fe-bb58544a8e93.html](http://www.glasgowdailytimes.com/news/beshear-requests-help-from-federal-legislators-on-epb-rate-issue/article_736e638e-5b6b-11e6-86fe-bb58544a8e93.html)

23 In the UNSE rate case, the Commission held state meetings in Nogales, Kingman, and  
24 Lake Havasu and was met with overwhelming customer resistance to mandatory demand  
25 charges. UNSE ultimately pulled its mandatory residential demand charge proposal.

1        These examples show just how unfair and unpopular mandatory residential demand  
2        charges are and why they shouldn't be approved.

3        **Q.    BASED ON THIS UNDERSTANDING OF HOW DEMAND CHARGES WORK,**  
4        **WHAT ARE THE REAL PROBLEMS WITH DEMAND CHARGES?**

5        A.    Demand charges are not inherently bad; however problems with demand charges come  
6        about when they are mandatory for residential customers. There is nothing wrong with  
7        APS offering them as one of many rate options for customers. They currently offer them  
8        as an option and about 10% of their customers have chosen demand charges as an option.

9        **Q.    WHAT PROBLEMS RESULT FROM MANDATORY DEMAND CHARGES?**

10      B.    Once we understand how demand charges work and what APS is proposing, we can  
11      evaluate the problems. Below is a list of just some of the problems. I will explain them  
12      in more detail. Demand charges:

- 13      1.     Are difficult to manage;
- 14      2.     Are confusing to customers; and
- 15      3.     Result in unintended consequences.

16      **Q.    WHY ARE DEMAND CHARGES DIFFICULT TO MANAGE?**

17      A.    Demand charges are difficult to manage for at least two major reasons (and there may be  
18      others): Customers would not be able to access and understand the necessary data; and  
19      the lengthy time period during which demand could be measured.

20      **Q.    WHAT ARE THE ISSUES CONCERNING DATA?**

21      A.    In order for any customer to make an informed decision about energy usage, the customer  
22      would have to have access to a lot of data, both historical and real time. Special  
23      equipment or programs to help analyze it and manage it would also have to be purchased.  
24      For example to fully manage demand, a customer would have to know the power



1 consumption and cycle time of every electrical appliance in the house such as the air  
2 conditioner, hair dryer, washer and dryer, computer and the hundreds of other appliances  
3 that we all use daily. Additionally, the customer would need some type of equipment to  
4 track, measure, and manage the data and the ability to use it to get real time data from  
5 APS concerning what electricity is being used at any given minute. Then each day, the  
6 customer would have to develop a plan on spacing out when to use certain appliances  
7 given that some standard appliances like air conditioning cycle during the day, generally  
8 turning on and off without direct human input. The customer would also have to be able  
9 to calculate in real time the demand effects of each electricity use during any given hour.  
10 To my knowledge this type of data is not available to customers to properly manage their  
11 demand. There is a lot of data available, but not what is necessary to manage and predict  
12 demand charges.

13 **Q. WHAT IS YOUR CONCERN ABOUT THE TIME PERIOD USED?**

14 A. If a customer has all the required data, equipment and knowledge what must he or she do  
15 with it? The customer has to make a plan to minimize usage and then execute on that  
16 plan. The time periods to be concerned about are from 3pm to 8pm each weekday  
17 (excluding holidays). That equals about 100 hours a month that each customer would  
18 have to monitor electric usage to manage the demand charge. All it takes to slip up  
19 during the month is to not control usage for just one of these 100 hours, and *surprise*,  
20 next month APS will assess a large demand charge. It will not matter how well the  
21 customer conserves electricity for the other 99 hours.

22 Companies that have rates schedules with demand charges hire people and purchase  
23 equipment to monitor and minimize demand charges. Most customers don't have the free  
24 time to watch their electricity from 3pm to 8pm weekdays, nor do they want to be  
25 bothered with it. Many customers are working during much of that time. It would be

1 extremely difficult to expect children or guests to operate according to your careful  
2 demand-reduction plan. And unfortunately, one strike and you are out.

3 **Q. DO YOU HAVE AN EXAMPLE OF HOW AN UNINTENDED HIGH DEMAND**  
4 **CHARGE COULD BE INCURRED?**

5 A. Assume you leave to go to the mountains for a month during the summer. You turn  
6 down or off all your electrical appliances while you are gone. You set the air conditioner  
7 at 85 degrees. You get a call from a relative who is going to be in town overnight and  
8 wants to stay at your house. You say OK. He gets to your house at 3pm and it is 85  
9 degrees inside. He turns the thermostat down to 68 degrees. You being a knowledgeable  
10 consumer remember you didn't warn him about demand charges but it is now 4pm. You  
11 call him to explain demand charges and not to use too much electricity between 3pm and  
12 8pm. He turns off the air conditioner. You get home and everything seems normal the  
13 temperature is 85 degrees. However, there will be a big surprise when you get your  
14 electric bill, a big demand charge because of that one hour your relative lowered the  
15 thermostat to 68 and the air conditioner ran full-bore to cool the house. There is no  
16 recourse, even if you don't use any other electricity for the rest of the month. Your  
17 demand charge will be calculated at the \$6.60 to \$16.40 per kW that your relative used.  
18 It is hard to offset a \$6.60 per kW by reducing other usage at \$.08 per kW.

19 **Q. HOW ARE CUSTOMERS CONFUSED BY DEMAND CHARGES?**

20 A. For years customers have been charged for the total amount of electricity they use plus a  
21 small monthly fee. Now with demand charges, a third charge will be added, introducing  
22 greater volatility into the monthly bill with little that a customer can do to control it. It is  
23 difficult to manage which appliances can be run at the same time and at what hour of the  
24 day. There are no remedies if a customer gets a large unexpected demand charge.  
25 Imagine if a cellular customer were billed a "demand charge" based on the maximum

1 number of texts during one hour instead of for texts per month. They would be confused,  
2 frustrated and mad.

3 **Q. DO YOU HAVE AN EXAMPLE OF HOW CONFUSING AND VOLATILE A**  
4 **BILL CAN BE?**

5 A. Yes. In fact I have had demand charges for years. I didn't even realize what plan I had  
6 and how the demand charges could vary from month to month until I got involved in the  
7 UNSE rate case in 2015. My wife informed me that we had demand charges that applied  
8 from 12 noon until 7 pm. That allowed us to do laundry, cooking and other things in the  
9 morning. It was APS service plan: Combined Advantage 7 pm-Noon. In that plan my  
10 basic service charge was \$0.556 per day, several other charges and a demand charge of  
11 \$13.50 for summer months and \$9.30 for winter months. What that meant was that every  
12 month APS would take the one hour of highest kWh usage during the month between  
13 noon and 7 pm during the week, excluding holidays, and multiply that times \$13.50 in the  
14 summer or \$9.30 in the winter to get my demand charge. From February 13, 2015,  
15 through January 12, 2017, the range of my demand charges has been a low of \$39.99 to a  
16 high of \$163.35. That is quite a bit of volatility.

17 My bill every month states what my demand charge was, and I can look up the history as  
18 I have done. What the current APS systems will not let me do is look up the specific day  
19 of the month and the one hour of that day that my demand charge was calculated on. I  
20 can get hourly usage data but not of the current day. So I can't even determine what  
21 caused my high demand charge or even if there is some pattern like 3 pm on the first  
22 Wednesday of the month. How can I or anyone manage demand usage without knowing  
23 what is happening in a timely manner. I have included a copy of one of my bills and  
24 demand charge summery (Exhibit PJQ-1). Adding to the confusion is the actual bill. My  
25 bill lists "charges for electricity services" that contains 22 lines of different charges. To

1 get my total demand charge I need to add two numbers together. Sometimes too much  
2 data is not helpful.

3 **Q. IS THERE ANY OTHER DATA THAT DEMONSTRATES CUSTOMER**  
4 **CONFUSION?**

5 A. Yes. APS in response to Staff request 5.2 provided the results of a survey of residential  
6 customers that currently have rate plans with demand charges. The response concludes

7 "Conclusions"

- 8 • There is generally a low level of awareness among customers on a demand rate of  
9 their rate plan or the demand feature.
- 10 • Their ability to manage their energy cost is primarily from shifting energy usage  
11 to off-peak hours, leveraging the TOU dimension of the plan.
- 12 • They are less confident about their ability to manage demand - with nearly half  
13 (49%) saying that they don't know how to control demand or that it's difficult.
- 14 • Nevertheless, most of these customers feel that they generally can effectively  
15 manage their energy costs and most are satisfied with their rate plan.
- 16 • The level of satisfaction ties to their willingness and ability to make lifestyle  
17 adjustments and ultimately benefit from the rate plan.
- 18 • Therefore, customer education regarding how to control energy costs will be  
19 essential to our successfully deploying demand rates to our broader customer  
20 base.

21 This shows that even though some customers have had demand charges since the early  
22 1980's and APS has been pushing voluntary demand charges, the residential customers  
23 didn't understand what demand charges were and how to manage them. In fact one thing  
24 that the customers did understand was time of use ("TOU") and found that it as the  
25 easiest way to reduce their electric bill.

1 **Q. WHAT KINDS OF UNINTENDED CONSEQUENCES COULD RESULT FROM**  
2 **MANDATORY RESIDENTIAL DEMAND CHARGES?**

3 A. These unintended consequences on residential customers include:

- 4 • Large bills;
- 5 • Surprise bills;
- 6 • Financial burden on fixed income, lower users;
- 7 • Requiring a change in lifestyles to manage charges;
- 8 • Extreme increases in many customers bills; and
- 9 • Frustration.

10 Mr. Rubin in his testimony presents some of the unintended consequences concerning  
11 cost recovery and individual customer bills.

12 **Q. YOU STATED THAT THERE MAY BE ISSUES WITH APS'S SHIFT, STAGGER**  
13 **AND SAVE PLAN; WHAT ARE THESE ISSUES?**

14 A. APS's Shift, Stagger and Save plan purports to show how to manage demand charges to  
15 save money. It greatly over-simplifies what a customer would have to do to not only  
16 save money but to avoid large monthly demand charges.

17 **Q. WHY WOULDN'T THE SHIFT COMPONENT OF APS'S OUTREACH PLAN**  
18 **HAVE MUCH EFFECT ON DEMAND CHARGES A CUSTOMER MUST PAY?**

19 A. APS's "Shift" component merely states to not use electricity between 3pm and 8pm  
20 during the week. A major assumption of this must be that customers, including families,  
21 will and can change their lifestyle. While this may work for appliances that have delay  
22 cycles like a dishwasher, or pool pumps that may have timers, most appliance must be  
23 manually turned on and off. For example my washing machine doesn't have a delay  
24 cycle like most appliances, so I must turn it on manually. Their suggestion to do laundry  
25 on the weekends is not something that everyone can do every weekday.

1        These types of suggestions may work most of the time, but remember they have to work  
2        for all 100 hours of the demand period; 99 hours is not good enough. So while a customer  
3        might save a little on the kWh charge between peak and off-peak prices, that would be a  
4        few cents per kWh not the \$6.60 per kW he or she would pay for demand charges. But all  
5        "Shifting" during the rest of the months would not offset a demand charge, if for some  
6        reason a customer needed to use the washer and dryer, turn down the thermostat, cook  
7        family meals, host a monthly meeting, or deal with any other unexpected event.

8        Additionally, this also requires parents to monitor their children's electrical usage. There  
9        are many examples of when a customer might have to use extra electricity during the  
10       3pm to 8pm timeframe. Remember, it only needs to be one hour during the 100 hours of  
11       the month to generate a high demand charge. There is no averaging or real offset to the  
12       demand charge you must pay. So while "Shift" might generally be a good idea, it will  
13       have little effect on a customer's demand charge and savings.

14    **Q.    WILL THE "STAGGER" COMPONENT OF APS'S PLAN HELP REDUCE**  
15    **DEMAND CHARGES?**

16    **A.**    No. The basic "stagger" premise is that a customer should not run appliances at the same  
17       time, instead staggering so as to run the washer and then the dryer. Again it is not that  
18       simple. During the same billing hour it doesn't matter if you run your washer and dryer  
19       at the same time or one after the other. APS's response to AURA data request 1.22 was:

20                Reference: Miessner testimony, p. 4, lines 23-24. Please confirm that each of the  
21                following examples (showing usage in 4 15-minute increments of a single on-  
22                peak hour) would have the same "maximum usage average over one hour" of 5  
23                kW. If this is not confirmed, please explain why not and provide supporting  
24                calculations.

25                a. Minutes 1-15: 5 kW; Minutes 16-30: 5 kW; Minutes 31-45: 5 kW; Minutes 46-  
26                60: 5 kW



b. Minutes 1-15: 9 kW; Minutes 16-30: 9 kW; Minutes 31-45: 1 kW; Minutes 46-60: 1 kW

c. Minutes 1-15: 1 kW; Minutes 16-30: 17 kW; Minutes 31-45: 1 kW; Minutes 46-60: 1 kW

*APS Response: Confirmed.*

The response "Confirmed" admits that this would be true. What APS is really saying is do not run appliances in the same hour. And this means that a customer with multiple loads can't unload the washer into the electric dryer, start the dryer, and then start a new load in the washer. And which appliances can be run in the same hour and what about appliances that cycle on and off? Unless you know the kW requirements of all your appliances and the cycle timing of your air conditioner and other appliances, this wouldn't work. Again remember you have to do this for all 100 hours not 99 hours. This will not much effect on the demand charge.

**Q. WHAT ABOUT THE EFFECTS OF "SAVE" COMPONENT OF THE PLAN?**

A. Again, the "Save" component is a great idea in general for how a customer could save on an electricity bill. Again, while all of these things could and should be done, they will not have much incremental effect on the demand charges a customer pays. Remember all it takes is one hour of high electricity use to generate a large demand charge.

**Q. IT SEEMS LIKE YOU ARE SAYING THAT THE SHIFT, STAGGER AND SAVE PLAN OVER-SIMPLIFIES HOW TO MANAGE DEMAND CHARGES; IS THAT A FAIR SUMMARY?**

A. Yes. The underlying data, knowledge, equipment and time to manage demand charges is more that shifting appliance usage, not running major appliances at the same time, and turning off fans when you leave a room. It requires a customer to devote considerable time and effort to manage the demand of all family members and guests for 100 hours of

1 every month. Companies can control their demand and related charges because they buy  
2 equipment and hire people to manage their demands; residential consumers don't have  
3 that luxury.

4 **Q. DO YOU HAVE ANY CONCERNS ABOUT APS'S OUTREACH PLAN?**

5 A. Yes. While some of the outreach plan is currently underway, I think it needs  
6 improvement to actually matter. It relies heavily on the Shift, Stagger and Save elements,  
7 which I have shown overly simplify demand management and are unlikely to  
8 meaningfully lower demand charges. Much of the data that would be necessary to  
9 manage and understand demand usage is not available today and theoretically will only  
10 be available in as yet unveiled demand webpage. Today a customer can't find out what  
11 hour of what day his or her demand charge was calculated on. It is unclear if that will be  
12 available on the new webpage. Additionally, going to mandatory 3-part rate design with  
13 demand charges is a major change from 2-part rate design with a usage and basic service  
14 charges only. Will there be shadow bills to show the effects on customers' bills, prior to  
15 its implementation? This will take significant time for customers to understand this major  
16 change.

17 Also based on APS's response to Staff request 5.2, it seems that most customers didn't  
18 understand they had demand charges or how to manage them. Demand charges first  
19 began at APS in 1981 and after 33 years customer understanding of demand charges  
20 remains low.

21 Based on a typical education curve and the required time to adequately educate  
22 customers, a comprehensive education plan must be put into place long before mandatory  
23 demand charges are approved. It is far too early to impose mandatory demand charges in  
24 this case.



1 **Q. DO YOU HAVE ANY FINAL RECOMMENDATIONS FOR THE COMMISSION**  
2 **ON APS'S RATE DESIGN?**

3 A. Yes. The Commission should do the following:

- 4 1. Not increase basic service charges.
- 5 2. Reject mandatory demand charges for all residential customers.
- 6 3. Apply across the board per centage increase in residential rates.
- 7 4. Reject APS rate for E-3 and use a standard 30% discount on total bill.
- 8 5. Reject APS rate for E-4 and use a standard 40% discount on total bill.

9 **Q. ON WHAT DO YOU BASE YOUR RECOMMENDATIONS?**

10 A. The recommendations are based on the following analysis presented in AURA's  
11 testimony:

- 12 1. Basic service charges increase cause burdens for some residential customer.
- 13 2. APS's premise that 3-part rate design better aligns cost causers with revenue  
14 recovery is incorrect.
- 15 3. The 3-part rate design will cause extreme bill changes to some residential  
16 customers while a percentage increase across the board will not.
- 17 4. There is no need to disrupt customers with large unexpected changes in their bills  
18 when it is not needed.
- 19 5. Customers are and will be confused about demand charges.
- 20 6. Customers will need to buy equipment to manage their demand usage.
- 21 7. Implementing demand charges will requires a significant lifestyle change by  
22 customers
- 23 8. Better education and tools need to be developed well in advance of proposing  
24 mandatory demand charges.

25 Shift, Stagger and Save doesn't help a customer manage demand charges all that much  
26 without more and better tools and education.

1 **Q. DO YOU HAVE ANY FINAL COMMENTS ON RESIDENTIAL DEMAND**  
2 **CHARGES?**

3 A. Yes. For all the reasons in my and Mr. Rubin's testimony, mandatory demand charges  
4 for any residential customers should be rejected. Optional demand charges are fine and  
5 may give APS more time to find better ways to educate the customers about them and  
6 determine if better tools and education cause more customers to voluntarily choose rate  
7 plans with demand charges.

8 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

9 A. Yes, it does.

# MY BILL

Exhibit PJQ-1

Your electricity bill  
September 14, 2015

Patrick Quinn

Your account number

Your service plan: Combined Advantage 7pm - Noon

Meter number:   
Meter reading cycle: 08

## Charges for electricity services

### Cost of electricity you used

Customer account charge	\$7.85
Delivery service charge	\$66.12
* Demand charge on-peak - delivery	\$48.60
Environmental benefits surcharge	\$13.13
Federal environmental improvement surcharge	\$0.51
System benefits charge	\$14.03
Power supply adjustment*	\$4.19
Metering*	\$6.14
Meter reading*	\$2.05
Billing*	\$2.31
Generation of electricity on-peak*	\$50.61
Generation of electricity off-peak*	\$87.16
* Demand charge on-peak - generation*	\$97.20
Federal transmission and ancillary services*	\$24.56
Federal transmission cost adjustment*	\$31.01
Four-Corners adjustment*	\$8.25
LFCR adjustor	\$6.77
Cost of electricity you used	\$470.49

### Taxes and fees

Regulatory assessment	\$1.28
State sales tax	\$26.95
County sales tax	\$3.37
City sales tax	\$12.99
Franchise fee	\$9.44
Cost of electricity with taxes and fees	\$524.52

**Total charges for electricity services \$524.52**

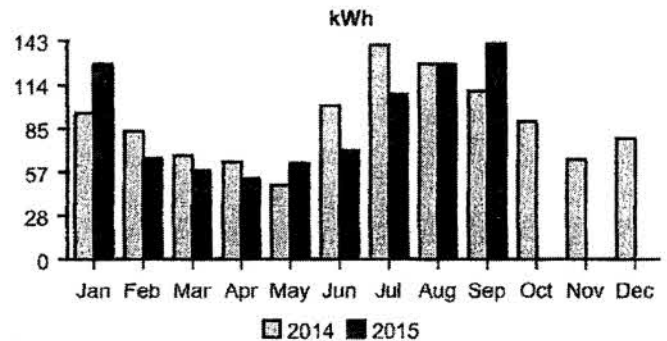
\* These services are currently provided by APS but may be provided by a competitive supplier.

\* Total Demand Charges \$ 145.80

## Amount of electricity you used

Meter reading on Sep 14	47794
Meter reading on Aug 12	43071
<b>Total electricity you used, in kWh</b>	<b>4723</b>
On-peak meter reading on Sep 14	7636
On-peak meter reading on Aug 12	6875
<b>On-peak electricity you used, in kWh</b> (Noon to 7 pm Monday to Friday)	<b>761</b>
<b>Off-peak electricity you used, in kWh</b> (7 pm to noon weekdays, all day Saturday and Sunday and certain holidays)	<b>3962</b>
On-peak demand meter reading	10.8
<b>Your billed on-peak demand in kW</b>	<b>10.8</b>

## Average daily electricity use per month



## Comparing your monthly use

	This month	Last month	This month last year
Billing days	33	29	30
Average outdoor temperature	92°	92°	87°
Your total use in kWh	4723	3749	3355
Percentage of on-peak use	16%	18%	15%
Your billed demand in kW	10.8	11.2	9.5
Your average daily cost	\$15.89	\$15.95	\$13.32



last payment of \$284.52 received on January 26, 2017

equalizer payment due : \$0.00

## charges for electricity services

for service at: [REDACTED]  
plan: combined advantage 7pm - noon

bill date: January 12, 2017

[view bill](#)

### usage for this month

[view your billing history summary](#)

billing days	read type	demand	on-peak (kWh)	off-peak (kWh)	total usage (kWh)	average (kWh)
30	Actual	6.7	388	2370	2758	92

### electricity used per month

usage breakdown

[download usage data](#) [graph](#) [table](#)

bill date	billing days	read type	demand	on-peak (kWh)	off-peak (kWh)	total usage (kWh)	average (kWh)	
01/12/2017	30	Actual	6.7	388	2370	2758	92	<a href="#">compare</a>
12/14/2016	34	Actual	9.4	453	2131	2584	76	<a href="#">compare</a>
11/09/2016	28	Actual	8.2	324	1779	2103	75	<a href="#">compare</a>
10/12/2016	29	Actual	7.2	289	1687	1976	68	<a href="#">compare</a>
09/13/2016	33	Actual	7.7	427	2683	3110	94	<a href="#">compare</a>
08/11/2016	29	Actual	9	565	2889	3454	119	<a href="#">compare</a>
07/13/2016	30	Actual	12.1	757	3251	4008	134	<a href="#">compare</a>
06/13/2016	32	Actual	8.4	430	2768	3198	100	<a href="#">compare</a>
05/12/2016	29	Actual	5.2	222	1526	1748	60	<a href="#">compare</a>
04/13/2016	29	Actual	5.5	242	1481	1723	59	<a href="#">compare</a>

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last payment of \$284.52 received on january 26, 2017

equalizer payment due : \$0.00

## charges for electricity services

for service at: [REDACTED]  
 plan: combined advantage 7pm - noon

bill date: january 12, 2017

view bill

### usage for this month

view your billing history summary

billing days	read type	demand	on-peak (kWh)	off-peak (kWh)	total usage (kWh)	average (kWh)
30	Actual	6.7	388	2370	2758	92

### electricity used per month

usage breakdown

download usage data

graph table

bill date	billing days	read type	demand	on-peak (kWh)	off-peak (kWh)	total usage (kWh)	average (kWh)	
03/15/2016	29	Actual	5.7	251	1518	1769	61	compare
02/15/2016	32	Actual	7.9	383	2074	2457	77	compare
01/14/2016	30	Actual	9.8	479	2604	3083	103	compare
12/15/2015	32	Actual	9.4	392	2304	2696	84	compare
11/13/2015	30	Actual	8.7	404	2035	2439	81	compare
10/14/2015	30	Actual	10.3	549	2441	2990	100	compare
09/14/2015	33	Actual	10.8	761	3962	4723	143	compare
08/12/2015	29	Actual	11.2	657	3092	3749	129	compare
07/14/2015	32	Actual	7.8	497	3016	3513	110	compare
06/12/2015	30	Actual	7.9	318	1872	2190	73	compare

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last payment of \$284.52 received on january 26, 2017

equalizer payment due : \$0.00

## charges for electricity services

for service at: [REDACTED]  
plan: combined advantage 7pm - noon

bill date: january 12, 2017

[view bill](#)

### usage for this month

[view your billing history summary](#)

billing days	read type	demand	on-peak (kWh)	off-peak (kWh)	total usage (kWh)	average (kWh)
30	Actual	6.7	388	2370	2758	92

### electricity used per month

#### usage breakdown

[download usage data](#) [graph](#) [table](#)

bill date	billing days	read type	demand	on-peak (kWh)	off-peak (kWh)	total usage (kWh)	average (kWh)	
05/13/2015	29	Actual	6.8	283	1592	1875	65	<a href="#">compare</a>
04/14/2015	29	Actual	4.3	210	1372	1582	55	<a href="#">compare</a>
03/16/2015	31	Actual	5.4	269	1588	1857	60	<a href="#">compare</a>
02/13/2015	30	Actual	6.3	354	1685	2039	68	<a href="#">compare</a>

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BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

TOM FORESE, Chairman  
BOB BURNS  
DOUG LITTLE  
ANDY TOBIN  
BOYD W. DUNN

IN THE MATTER OF THE APPLICATION OF  
ARIZONA PUBLIC SERVICE COMPANY FOR  
A HEARING TO DETERMINE THE FAIR  
VALUE OF THE UTILITY PROPERTY OF THE  
COMPANY FOR RATEMAKING PURPOSES,  
TO FIX A JUST AND REASONABLE RATE OF  
RETURN THEREON, TO APPROVE RATE  
SCHEDULES DESIGNED TO DEVELOP SUCH  
RETURN.

DOCKET NO. E-01345A-16-0123

**DIRECT TESTIMONY  
OF  
SCOTT J. RUBIN  
ON BEHALF OF  
ARIZONA UTILITY RATEPAYER ALLIANCE  
CONCERNING RATE DESIGN**

**FEBRUARY 3, 2017**

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## **EXECUTIVE SUMMARY**

The Arizona Utility Ratepayers Alliance offers the testimony of Scott J. Rubin, a rate-design expert.

Mr. Rubin first discusses the relationship between revenues and costs for residential customers who are not on the E-3 or E-4 rates, evaluating both the existing rate design and APS's proposed rate design, which features mandatory demand charges for residential customers. He discusses in detail the methodology he used to evaluate these methodologies. He then compared the ability of each rate design (existing and mandatory demand charges) and concluded that APS's proposed rate design with mandatory demand charges did no better in fairly recovering the cost of serving residential customers than did APS's existing rate design including time-of-use rates.

Mr. Rubin next evaluates the impact on undiscounted residential customers of the Company's proposed rate design. He first criticizes APS's study of the impacts as lacking a summary and failing to quantify the number of customers affected or presenting information by bill. Mr. Rubin discusses his own bill-impact study. Among other things, Mr. Rubin's study shows that APS's rate design would result in annual bill changes ranging from a 53% decrease to a 168% increase. Overall, Mr. Rubin concludes that the impacts from APS's proposed rate design are extraordinarily large, unreasonable, and unnecessary to move rates closer to recovering the cost of service.

Mr. Rubin next discusses the customer impacts from the Company's proposals on E-3 and E-4 customers. He uses the same methodologies he used to critique APS's proposed move to mandatory residential demand charges. He concludes that APS's proposed changes would have devastating effects on some E-3 and E-4 customers.

Mr. Rubin concludes his testimony with his recommendations for designing residential rates to reflect the revenue requirement determined by the Commission in this case. APS's proposed residential rate design would be unreasonable and should not be adopted by the Commission. Similarly, APS's proposed restructuring of the E-3 and E-4 discounts would not be reasonable. Mr. Rubin concludes that any rate increase should be implemented by equal percentages for residential customers. Further, the Commission should restructure the E-3 and E-4 discounts to provide discounts of 30% and 40% respectively.

**I INTRODUCTION**

**Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND TELEPHONE NUMBER.**

A. My name is Scott J. Rubin. My business address is 333 Oak Lane, Bloomsburg, PA 17815, and my telephone number is 570-387-1893.

**Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS MATTER?**

A. I am testifying on behalf of the Arizona Utility Ratepayer Alliance ("AURA").

**Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

A. I am an independent consultant and an attorney. My practice is limited to matters affecting the public utility industry.

**Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS CASE?**

A. I have been asked by AURA to review the direct testimony, exhibits, and discovery responses concerning rate design issues filed by Arizona Public Service Company ("APS" or "Company").

**Q. WHAT ARE YOUR QUALIFICATIONS TO PROVIDE THIS TESTIMONY IN THIS CASE?**

A. I have testified as an expert witness before utility commissions or courts in the District of Columbia; the province of Nova Scotia; and the states of Alaska, Arizona, California, Connecticut, Delaware, Illinois, Kentucky, Maine, Maryland, Massachusetts, Mississippi, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, and West Virginia. I also have testified as an expert witness before various legislative committees. I also have served as a consultant to the staffs of state utility commissions, as well as to national utility trade associations, and state and local governments throughout the country. Prior to

1 I discussed and analyzed several options for designing cost-based residential rates. A  
2 copy of the paper is provided as Exhibit SJR-1 accompanying this testimony.

3 **Q. DO YOU HAVE ANY EXPERIENCE THAT IS PARTICULARLY RELEVANT**  
4 **TO THE ISSUES IN THIS CASE?**

5 A. Yes, I do. I have testified on numerous occasions as a rate design and cost of service  
6 expert. For example, since 2013, I have testified as a cost-of-service study and/or rate  
7 design expert in electric utility rate cases in Alaska (Chugach Electric and Municipality  
8 of Anchorage), Arizona (UNS Electric), Connecticut (United Illuminating), District of  
9 Columbia (Potomac Electric), Illinois (Commonwealth Edison and Ameren),  
10 Massachusetts (Mass. Electric), Mississippi (Entergy), New Hampshire (Liberty and  
11 Unitil), Ohio (Duke Energy, Dayton Power & Light, and the FirstEnergy companies), and  
12 Pennsylvania (Pike County Light & Power).

13 In addition, I have developed considerable expertise on issues related to the provision of  
14 affordable utility service to low-income customers. I have testified as an expert witness  
15 concerning these issues before state regulatory commissions and before committees of  
16 the U.S. Congress. I also have conducted research on affordability issues for the National  
17 Rural Water Association, American Water Works Association, Water Research  
18 Foundation, and others. I have participated in numerous professional meetings and  
19 advisory panels addressing affordability issues, including being selected as a consultant  
20 to the U.S. Environmental Protection Agency's National Drinking Water Advisory  
21 Council and a member of the City of Detroit's Blue Ribbon Advisory Panel on  
22 affordability issues. My complete curriculum vitae is attached to this testimony as  
23 Appendix A.

1 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?**

2 A. Yes, I testified as a rate design and cost-of-service study expert witness before this  
3 Commission in a rate case involving the former Citizens Utilities' water operations in  
4 1996 (Docket Nos. E-1032-95-417, et al.) and in UNS Electric's most recent rate case  
5 (Docket No. E-04204A-15-0142) in 2016.

6 **II PURPOSE OF TESTIMONY AND OVERVIEW**

7 **Q. WHAT IS THE SPECIFIC PURPOSE OF YOUR TESTIMONY IN THIS**  
8 **MATTER?**

9 A. APS is proposing dramatic changes in its rate design for residential customers. The  
10 Company also is proposing significant changes in its discounts for low-income  
11 customers. APS claims that its new rate design, which includes mandatory demand  
12 charges for most residential customers, more equitably recovers the cost of service than  
13 the rate design that is currently in effect where demand charges are optional. My  
14 testimony will evaluate APS's claims using data provided by the Company, evaluate the  
15 impact of the proposed rate design changes on customers, and make recommendations  
16 concerning APS's residential rate design.

17 **Q. DO YOU HAVE ANY GENERAL CAVEATS ABOUT THE ANALYSES**  
18 **CONTAINED IN YOUR TESTIMONY?**

19 A. Yes. Throughout my testimony, I use the results of APS's cost-of-service study, the  
20 Company's proposed revenue requirement, and the Company's proposed allocation of any  
21 increase to the residential customer class. By using these assumptions, I can ensure that  
22 my calculations can be compared on an "apples-to-apples" basis with the Company's  
23 calculations. That is, the rate design options I evaluate each collect the same amount of  
24 revenues (within a very small margin from rounding) as would be collected from the  
25 Company's proposed residential rates.

1 This is standard practice in rate design testimony. I would caution, however, that it  
2 should not be taken as an endorsement by me or AURA of the Company's claims  
3 concerning revenue requirements, cost-of-service study assumptions, or inter-class  
4 revenue allocation.

5 **Q. BEFORE GETTING INTO THE SPECIFICS OF APS'S PROPOSAL, WHAT IS**  
6 **YOUR GENERAL UNDERSTANDING OF APS'S EXISTING RATE DESIGN**  
7 **FOR RESIDENTIAL CUSTOMERS?**

8 A. At the present time, APS has one of the most complex residential rate designs that I have  
9 seen in more than 30 years of reviewing and evaluating utility rates. APS customers have  
10 the option to pay two-part rates (that is, rates that contain a customer charge and an  
11 energy charge) or a variety of three-part rates (that is, rates that contain a customer  
12 charge, energy charge, and demand charge). Different three-part rates measure demand  
13 over different time periods. Depending on the specific rate, demand may be measured  
14 between 9:00 a.m. and 9:00 p.m. or between noon and 7:00 p.m. In addition, several of  
15 the rate options also have a seasonal or time-of use component so that rates (or some  
16 portion of the rates) are higher in the summer months (May through October) or during  
17 on-peak periods than they are in the non-summer months or off-peak periods. As of year-  
18 end 2015, APS had more than 100,000 customers on a three-part rate.

19 **Q. IN GENERAL TERMS, HOW IS APS PROPOSING TO CHANGE ITS**  
20 **RESIDENTIAL RATE DESIGN?**

21 A. APS is proposing to make three-part rates mandatory for all residential customers who  
22 use an average of more than 600 kilowatt-hours ("kWh") per month. This proposal  
23 would have the effect of placing approximately four out of every five residential  
24 customers on a three-part rate, or roughly five times the number of customers who  
25 currently pay a demand charge. In addition, APS is proposing to change the period over

1        which demand is measured to 3:00 p.m. to 8:00 p.m.; a change that also would affect  
2        customers who are currently on one of the existing three-part rates. So, every residential  
3        customer averaging more than 600 kWh per month could be significantly affected by the  
4        new APS rate design.

5        **Q.    IS APS PROPOSING ANY OTHER SIGNIFICANT CHANGES IN**  
6        **RESIDENTIAL RATE DESIGN?**

7        A.    Yes. The Company also is proposing to restructure its discount program for low-income  
8        and medical-aid customers, the E-3 and E-4 rates, respectively. At the present time, the  
9        amount of the discount varies with the amount of electricity used by the customer during  
10       the month. APS is proposing to change the discount to a flat amount per day for all E-3  
11       and E-4 customers (with the E-4 discount per day being larger than the E-3 discount per  
12       day).

13       **Q.    HOW IS THE REMAINDER OF YOUR TESTIMONY ORGANIZED?**

14       A.    In Section III, I will discuss the relationship between revenues and costs for residential  
15       customers who are not on the E-3 or E-4 rates, evaluating both the existing rate design  
16       and APS's proposed rate design. In Section IV, I will evaluate the impact on  
17       undiscounted residential customers of the Company's proposed rate design. Section V  
18       contains a discussion of the customer impacts from the Company's proposals on E-3 and  
19       E-4 customers. I conclude my testimony with Section VI which contains my  
20       recommendations for designing residential rates to reflect the revenue requirement  
21       determined by the Commission in this case.



**III RATE DESIGN: RELATIONSHIP OF REVENUES TO COSTS**

**Q. WHAT DOES APS CLAIM REGARDING ITS REVISED RATE DESIGN?**

A. APS witness Ahmad Faruqui claims that there are inefficiencies in the current rate design where many customers pay a two-part rate (customer charge and energy charge) such that customers with lower load factors (that is, relatively low energy consumption for the amount of peak demand they place on the system) "would not pay for all the costs they create." Faruqui PFT p. 3, lines 12-13. Dr. Faruqui then asserts that this is a "structural inefficiency that can be ameliorated through a rate design that includes three parts: a fixed charge, a demand charge, and a volumetric charge." Id., lines 17-18. Later in his testimony, he claims that there is an "inevitable and indisputable cost shift from customers with lower load factors ... to customers with higher load factors." Id., p. 11, lines 21-23.

Finally, Dr. Faruqui makes the following statement about the effect of APS's proposal to place most customers on three-part (that is, demand-charge) rates: "Each of APS's proposed three-part rates more closely match demand, fixed, and variable costs with demand, fixed, and variable charges and will reduce this inequity so that all customers will pay their fair share of the costs associated with the generation of electricity, its delivery through the utility's transmission and distribution system, and customer service." Id., p. 22, line 26 to p. 23, line 3.

**Q. DID DR. FARUQUI PRESENT ANY DATA OR ANALYSES THAT COMPARED THE COMPANY'S EXISTING AND PROPOSED RATE DESIGNS IN THEIR ABILITY TO RECOVER COSTS IN AN EQUITABLE MANNER?**

A. No. AURA specifically asked Dr. Faruqui to provide all data and analyses on which he relied for his conclusions about the inefficiency of the existing rate design, the superiority of APS's proposed rate design, and either rate design's ability to equitably recover costs

1 from residential customers. (AURA Data requests 1.13 to 1.16.) Dr. Faruqui  
2 consistently responded that he did not conduct any such studies and instead relied on  
3 general studies and economic theory for his conclusions. Indeed, he claimed that "no  
4 quantification was necessary" to draw conclusions about the equity or economic  
5 efficiency of different rate design options.

6 **Q. IS DR. FARUQUI CORRECT?**

7 A. No, he is not correct. Dr. Faruqui believes it is "indisputable" (in his words) that a rate  
8 design that includes something called a "demand charge" will more accurately recover  
9 demand-related costs than a rate design that does not include a demand charge. In fact,  
10 though, there are numerous different types of demand charges, the effects of which can  
11 vary significantly from one another. For example, the demand to which a demand charge  
12 applies may be based on the customer's highest 15 minutes (or 30 minutes or 60 minutes)  
13 during the year, the customer's highest peak during the month, the customer's highest use  
14 during a season, or others. Further, the demand charge itself can be a fixed rate per  
15 kilowatt ("kW") per year, or can vary by month or season.

16 Similarly, there are many different types of two-part rates. For example, a two-part rate  
17 can have a rate per kWh that varies by time of day, month, season, usage level, or a  
18 combination of these factors. Just because something is called a "demand charge" does  
19 not mean that it accurately represents the demand-related costs a customer causes the  
20 utility to incur. And just because a rate design does not contain a specific component  
21 called "demand" does not mean that the rates fail to reflect principles of cost causation  
22 that would have higher-cost customers pay more toward demand-related costs than  
23 lower-cost customers. It requires specific analysis for the utility and the particular rate  
24 design proposals to determine whether any particular rate design more closely tracks the  
25 cost of serving customers than does another rate design.



**Q. WHY IS THIS THE CASE?**

A. Any rate design for a large customer class is based on the average cost to serve the class. To develop individual rates, we use proxies to try to fairly estimate the factors that make some customers more costly to serve than others. For example, we know that the size of the line transformer that serves the customer is related to the customer's highest usage during a year. We also know, for example, that the Company's investment in substations is related to the customer's contribution to the class's non-coincident peak demand -- again a single hour (or less) during the year. It is neither practical nor fair, however, to assign costs solely based on a single hour of usage during an entire year or even multi-year period. Indeed, a customer class's peak hour of usage for a year is not known with certainty until the end of the year, so it is impossible to use that information for billing a customer each month. Further, billing based on a single hour per year would give some customers (such as those away from home during that peak hour) the free use of the substation (for example) during the other 8,759 hours of the year.

Utility rate-designers recognize this problem and, therefore, develop proxies that are intended to fairly represent the differences among customers. We know that these proxies are not precise, but if they make sense (higher-demand customers tend to pay more than lower-demand customers, for example) and are easy for customers to understand, then the resulting rates should be fair to all customers. For example, if there is a reasonable relationship between a customer's energy consumption and a customer's peak demand, then it might be reasonable to charge the customer rates based on energy consumption rather than trying to construct a demand charge. Indeed, it is possible that an energy rate could be a better proxy than a demand charge, depending on what demands are being measured (as I discuss elsewhere). Of course, the opposite also could be true. You simply do not know until you conduct the analysis. That is why I disagree

1 so strongly with Dr. Faruqui's assertion that it is "indisputable" that something called a  
2 "demand charge" must bear a better relationship to the cost of service than a rate design  
3 where demand-related costs are collected through an energy charge. It is impossible to  
4 know which is a better proxy for any particular utility without performing a detailed  
5 analysis for that utility; something Dr. Faruqui did not do.

6 **Q. WHAT DO YOU MEAN BY THE COST TO SERVE AN INDIVIDUAL**  
7 **CUSTOMER?**

8 A. It is virtually impossible to measure the actual cost to serve each of the Company's one  
9 million residential customers. A customer may be served by a pole, line, and transformer  
10 that were installed last month, in which case the cost to serve the customer would be very  
11 high compared to the average cost. A few blocks away, however, customers may be  
12 served by facilities that are 20 or 30 years old and almost fully depreciated, in which case  
13 the actual cost to serve the customer would be much lower than average. Similarly,  
14 customers who live close to substations are relatively less expensive to serve than  
15 customers who are more distant from a substation, because of the length of cable, number  
16 of poles, and other equipment needed to bring service to a customer.

17 Another example would be to compare a customer who receives his bill by mail and calls  
18 the call center with questions about his bill and a customer who receives her bill online  
19 and doesn't call the call center. The first customer would be more costly to serve (call  
20 center time, postage and paper for the bill, etc.) than the second customer, but a  
21 reasonable rate design does not distinguish between these types of customers. In other  
22 words, for a large customer class, like residential customers, it is neither feasible nor  
23 required to try to determine the actual cost of serving individual customers.

1 **Q. HOW, THEN, IS THE COST TO SERVE A CUSTOMER ESTIMATED?**

2 A. The cost of serving a customer is estimated by using the results of a cost-of-service study  
3 ("COSS"), such as the one prepared by APS witness Snook. The COSS shows the  
4 components of cost needed to serve the average customer in a customer class. For  
5 example, the COSS may show that it costs \$5.00 per month to provide a customer with a  
6 meter and bill, read the meter, and provide a call center and other customer service  
7 infrastructure. The COSS does not try to distinguish among customers who use these  
8 services in different ways. Instead the COSS gives an average cost for each type of  
9 customer, generally categorized as demand-related costs, energy-related costs, and  
10 customer-related costs, with some sub-categories of each category.

11 **Q. IS IT FAIR TO CUSTOMERS TO BASE COSTS AND RATES ON CLASS**  
12 **AVERAGES?**

13 A. Yes. For many of cost elements, a customer's characteristics will change over time. For  
14 example, if a customer is served by a depreciated, 25-year-old line transformer, the actual  
15 cost of serving the customer for that component would be much lower than average. If  
16 tomorrow the transformer is replaced with a new one, all of a sudden the cost to provide  
17 the customer with a line transformer is much higher than average. As the transformer  
18 ages, the cost comes closer to average, then eventually falls below the class average. If  
19 the customer has a relatively equal chance of being either above-cost or below-cost at any  
20 point in time, and especially if the customer's relationship to cost will change over time,  
21 then it is reasonable to use the class average cost to determine the cost to serve a  
22 customer.

23 If, however, many customers have the same specific, unchangeable characteristics that  
24 result in higher or lower costs, then it might be reasonable to establish a separate  
25 customer class solely for customers with those defined characteristics. For example,

1       some utilities that serve highly urbanized areas have separate rates for residential  
2       customers in large multi-family buildings (such as high-rise apartment or condominium  
3       buildings) because certain significant cost characteristics are different and unchanging for  
4       such customers as compared to customers in suburban, single-family types of structures.

5       **Q.     DID YOU DETERMINE THE COST TO SERVE EACH RESIDENTIAL**  
6       **CUSTOMER OF APS?**

7       A.     Yes, I determined the cost to serve each residential customer for which APS had a full  
8       year of consumption and demand data. APS provided the customer data for  
9       approximately 950,000 customers in response to data requests AURA 1.19 and AURA  
10      1.20.

11      **Q.     HOW DID YOU DETERMINE THE COST TO SERVE EACH RESIDENTIAL**  
12      **CUSTOMER?**

13      A.     I used the electronic version of the Company's COSS to determine the average cost for  
14      each component of the cost to serve the residential class. Those components are:

- 15           • Production Demand;
- 16           • Production Energy;
- 17           • Transmission & Ancillary;
- 18           • Distribution Substation;
- 19           • Distribution Primary Lines;
- 20           • Distribution Secondary;
- 21           • Customer Accounts;
- 22           • Metering;
- 23           • Billing;
- 24           • Meter Reading;
- 25           • Low-Income Discount; and

1                   •   System Benefits.

2           I then categorized each of these types of costs into a cost-causation category, consistent  
3           with the way in which the cost is allocated in the COSS. In the COSS, there are five  
4           essential allocation factors used to allocate all of these costs: contribution to four summer  
5           monthly system coincident peak demands ("4 CP"), highest class non-coincident peak  
6           ("NCP"), the sum of each customer's maximum peak demand ("Indiv. max"), energy  
7           consumption ("Energy"), and the number of customers ("Customers"). After placing  
8           each type of cost into the appropriate category, I totaled the costs in each category, then  
9           divided by the residential class's number of units to develop the unit cost. I show this  
10          analysis on Exhibit SJR-2.

11   **Q.    CAN YOU GIVE AN EXAMPLE?**

12   A.    Yes. The simplest example is Indiv. max. The only costs in the COSS allocated based  
13          on individual customer peak demands are Distribution Secondary costs. In the  
14          Company's COSS, there is a total of \$173,409,381 in costs allocated to the residential  
15          class for Distribution Secondary costs. I then divided this amount by the sum of  
16          customer peak demands in the class, which is 7,258,543 kW, to obtain the unit cost for  
17          costs related to a customer's maximum individual peak demand of \$23.89 per kW.

18   **Q.    HOW IS THIS INFORMATION USED TO ESTIMATE THE COST TO SERVE A**  
19   **SPECIFIC CUSTOMER?**

20   A.    In utility rate cases, rate design and COSS experts (including me) are always talking  
21          about "cost causation." It is important to understand what that means. As I explained  
22          above, with the possible exception of very large customers under special rates, we do not  
23          attempt to determine the actual cost to serve each customer, rather we are determining the  
24          cost to serve an average customer in the class. For this reason, when we attempt to  
25          determine the cost to serve a particular customer, we are actually determining how a

customer's use of the electric system affects the costs that are allocated to the customer's class.

For example, using the data above, if a customer's highest demand during the year were 7 kW, the customer would have caused additional costs to be incurred equal to \$23.89 per kW x 7 kW, or \$167.23 for the year.

**Q. WHAT DID YOU DO NEXT?**

A. I applied the unitized costs of service from Exhibit SJR-2 to the specific characteristics of each of the 950,000 customers in the data set provided by APS. These specific characteristics are sometimes referred to as a customer's "units of service." That is, for each customer, I multiplied the customer's units of service by the corresponding element of the unitized cost of service. When the results for a customer are summed, we have an estimate of the cost to serve each customer.

**Q. CAN YOU PROVIDE AN EXAMPLE?**

A. Yes. Table 1 shows these calculations for one customer using actual data (Customer Identifier 1 in the data set).

**Table 1: Calculation of Cost of Serving a Residential Customer**

Cost Type	Measure	Units	Unit Cost	Total Cost
4 CP	kW	2.20	\$ 167.73	\$ 369.00
NCP	kW	0.29	\$ 63.04	18.28
Indiv. max	kW	13.90	\$ 23.89	332.08
Energy	kWh	8,652.60	\$ 0.0523	452.23
Customers	Customer	1.00	\$ 181.77	181.77
Total				\$ 1,353.36

1 **Q. DO THE DATA FOR THIS CUSTOMER ILLUSTRATE ANY IMPORTANT**  
2 **POINTS?**

3 A. Yes. This customer provides an excellent example of the point I made earlier: just  
4 because something is called a "demand charge" does not mean it is providing an accurate  
5 representation of how demand-related costs are incurred. There are three measures of  
6 demand in the COSS, each of which occurs at a very different point in time: system  
7 coincident demand (4 CP), class non-coincident peak demand (NCP), and the customer's  
8 individual peak demand (Indiv. max). This particular customer contributed very little to  
9 the 4CP and NCP demands (2.20 kW and 0.29 kW, respectively), but had a much higher  
10 individual peak demand (13.90 kW). As a percentage of the total residential class  
11 (slightly more than one million customers), this one customer accounted for about 0.63  
12 millionth of the class's contribution to 4 CP demand, 0.07 millionth of the class's NCP  
13 demand, but 1.91 millionth of the class's individual customer demands.<sup>1</sup> Further, most  
14 demand-related costs in the COSS are related to either 4 CP or NCP demand. A  
15 comparatively small amount is based on Indiv. max demand. If the "demand charge" is  
16 based on the customer's individual peak demand, rather than the customer's contributions  
17 to the system 4 CP or class NCP, this customer would be charged far more than the total  
18 demand-related cost to serve the customer. Of course, it is possible that other customers  
19 have the opposite circumstances: they have relatively higher contributions to system or  
20 class demands than they do to total individual demands of class members. As I said  
21 earlier, just because something is called a "demand charge" does not mean that it  
22 accurately reflects a customer's contribution to demand-related costs.

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<sup>1</sup> The class demand totals, as shown in Exhibit SJR-2, are 3,472,165 kW 4 CP, 4,304,302 kW NCP, and 7,258,543 kW Indiv. max.



1 **Q. WHY IS THIS ESTIMATE OF THE COST TO SERVE EACH CUSTOMER**  
2 **IMPORTANT?**

3 A. This estimate of the cost to serve each customer can be used to compare the revenues that  
4 would be collected from each customer under different rate design options.

5 **Q. DID YOU PERFORM THIS COMPARISON OF COSTS TO REVENUES FOR**  
6 **ALL 950,000 CUSTOMERS IN THE COMPANY'S DATA SET?**

7 A. No. Before performing this analysis, I removed from the data set all customers who  
8 received either a low-income discount (E-3) or a medical-device discount (E-4). The  
9 existing and proposed rates for those customers are not designed to reflect the cost of  
10 serving the customers; rather the rates are based on assumptions about customers' ability  
11 to pay for service or other non-cost factors. In comparing revenues under different rate  
12 options to the cost of service, therefore, I only used customers who had not received the  
13 E-3 or E-4 discount during the test year (calendar year 2015). In addition, some of the  
14 customers in the data set were missing some information needed to calculate the cost of  
15 service, so they could not be included in this analysis. After removing the E-3 and E-4  
16 customers and the incomplete customers from the data set, there were approximately  
17 859,000 customers remaining.

18 **Q. WHAT DID YOU DO NEXT?**

19 A. Next I calculated the annual revenues each customer would be billed under three rate  
20 options: present rates (that is, the rates in effect when APS filed this case), APS proposed  
21 rates, and a rate option that increases the revenues from each customer by the same  
22 percentage (approximately 19%). That last option represents the present rate design with  
23 all rates increased to recover the residential class's portion of the Company's proposed  
24 increase in revenue requirement. I would note that I am not using any analysis  
25 comparing costs and revenues under present rates because I am accepting for the sake of



1 comparing different rate design options that APS is "entitled" to the revenue requirement  
2 it requested. As I mentioned at the outset of my testimony, I am making this assumption  
3 solely to enable the comparison of different rate design options.

4 **Q. AFTER YOU CALCULATED THE REVENUES, HOW DID YOU COMPARE**  
5 **REVENUES AND COSTS FOR EACH CUSTOMER?**

6 A. First, I calculated the difference between costs and revenues for each customer. If a  
7 customer provided revenues in excess of the cost to serve the customer, the result was a  
8 positive number; if revenues were less than costs, the result was a negative number.

9 I then performed three statistical comparisons designed to describe the dispersion in these  
10 differences between costs and revenues:

- 11 • Standard deviation: calculated based on the difference between revenues and  
12 costs, then that difference is squared; the squared amounts are then summed,  
13 divided by the number of customers, and the square root is taken.
- 14 • Mean of absolute deviations: calculates the absolute value of the difference  
15 between revenues and costs for each customer, then reports the average  
16 difference.
- 17 • Median of absolute deviations: calculates the absolute value of the difference  
18 between revenues and costs for each customer, then reports the median difference  
19 (that is, the point at which 50% of the differences were higher and 50% were  
20 lower).

21 From my understanding of basic statistics, each of these methods is recognized as a  
22 reasonable (though somewhat different) representation of the dispersion within a group of  
23 observations. For each of them, the smaller the number (the closer to zero), the closer  
24 revenues are to costs for each customer.

1 **Q. TO PUT YOUR ANALYSIS IN PERSPECTIVE, WHAT WERE THE AVERAGE**  
2 **COSTS AND REVENUES FOR YOUR DATA SET OF 859,000 CUSTOMERS?**

3 A. In this data set, the average cost of service was approximately \$1,891 per customer per  
4 year. The average revenues under either APS's proposed rates or an across-the-board  
5 19% increase for residential customers was approximately \$1,734 per customer per year.  
6 I believe that most of the difference between these figures results from the costs including  
7 the amounts that these customers pay to support programs for low-income customers and  
8 system benefits. The revenues, however, are base revenues only without consideration of  
9 the riders to pay for those costs. In any event, the difference is not material to my  
10 analysis because the revenues under both rate design options are essentially the same (a  
11 difference of less than two cents in the average annual revenues per customer between the  
12 two options).

13 **Q. WHAT WAS THE FIRST COMPARISON YOU PERFORMED?**

14 A. The first comparison looks at the average (or mean) difference between revenues and  
15 costs and the standard deviation. For the present rate design option (that is, present rates  
16 increased by 19%), the average difference between revenues and costs was -\$158.52 with  
17 a standard deviation of \$316.58. In other words, the data are fairly widely dispersed with  
18 a standard deviation that is approximately twice as large as the average. In simple terms,  
19 there are a lot of customers who pay more or less than the cost to serve them.

20 I conducted the same analysis using APS's proposed rate design. The results of that  
21 analysis are nearly identical. The average difference between revenues and costs  
22 was -\$158.60 with a standard deviation of \$310.54. The standard deviation was slightly  
23 less (about \$6) but there is still a very wide range of diversity among the results.

**Q. WHAT WAS YOUR SECOND STATISTICAL COMPARISON?**

A. The second comparison uses the absolute value of the difference between revenues and costs. For this comparison, a result where revenues are \$50 higher than costs is exactly the same as a result where revenues are \$50 lower than costs. The average of all of the absolute values is then calculated and compared. For the option where all present rates are increased by the same percentage, the average of the absolute value of differences is \$253.25. That is, the average customer provides revenues within about plus-or-minus ( $\pm$ ) 13.4% of average costs of \$1,891.

Performing this same analysis for the Company's proposed rate design yields a nearly identical result. The average difference is \$258.58 -- about \$5 worse than the average difference under the present rate design option, representing revenues within  $\pm$  13.7% of costs.

**Q. WHAT DID YOUR THIRD ANALYSIS SHOW?**

A. The third analysis also uses the absolute value of differences, but instead of reporting the average difference, it uses the median difference. The median is the point at which 50% of the observations are higher and 50% are lower. The median can be useful in conjunction with the mean to see how tightly grouped the data might be. Using this analysis for the present rate design showed a median of \$190.01. The median is lower than the average which indicates that there are some customers who experience large differences that are causing the average to increase.

Once again, the results for the Company's proposed rate design are nearly identical, with a median of \$202.18. The median is about \$10 higher than under the present-rate option, but the average is about \$5 higher, which would indicate that there may be fewer of the less extreme results at the high end that are pushing up the average.

**Q. WHAT DO YOU CONCLUDE FROM THESE ANALYSES?**

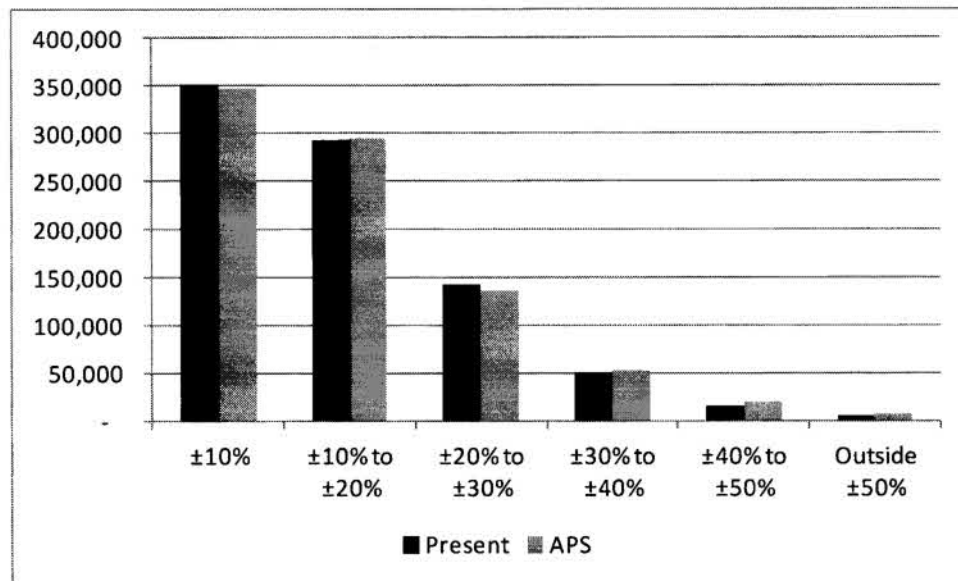
A. I conclude that there is essentially no difference in the ability of the two rate design options to serve as reasonable proxies for the cost to serve customers. Of the three tests, two slightly favor the present-rate option and one slightly favors the APS rate design, but neither result is dramatic. For all intents and purposes, I would conclude that there is no difference between the two rate design options in their abilities to fairly recover the cost of serving customers.

**Q. YOU MENTIONED THAT YOU ALSO HAD A COMPARISON THAT WOULD HELP TO ILLUSTRATE THIS POINT. PLEASE DESCRIBE THAT COMPARISON.**

A. To help illustrate the relationship between revenues and costs under the two options, I performed a simple comparison: how many customers had revenues with  $\pm 10\%$  of costs,  $\pm 20\%$  of costs, and so on. The results are shown in Table 2 and the following graph.

**Table 2: Comparison of Relationship Between Revenues and Costs  
Under Present Rate Design and APS Proposed Rate Design**

<b>Cost Range</b>	<b>Present Design</b>	<b>APS Proposed</b>
$\pm 10\%$ of cost	350,732	347,410
$\pm 10\%$ to $\pm 20\%$ of cost	292,640	296,103
$\pm 20\%$ to $\pm 30\%$ of cost	142,744	136,666
$\pm 30\%$ to $\pm 40\%$ of cost	50,418	51,732
$\pm 40\%$ to $\pm 50\%$ of cost	16,024	19,673
Outside $\pm 50\%$	5,483	6,409



**Q. WHAT DO YOU CONCLUDE FROM THIS COMPARISON?**

A. This comparison reinforces my conclusion that when evaluating the ability of each rate design option to reflect the cost of service, there is no difference between the present rate design and APS's proposed rate design. By all measures I evaluated, the two options are essentially identical.

**Q. WHAT DOES THIS MEAN?**

A. My analyses show that Dr. Faruqui's conclusion is not correct. He alleged, without conducting any analysis, that a rate design where most customers paid three-part rates would necessarily do a better job of reflecting the cost of serving individual customers than would the existing rate design where most customers paid two-part rates. My analyses show that this assertion is wrong. In fact, the results of APS's proposal, where most customers would pay three-part rates, are indistinguishable from the results of the current rate design, where most customers pay two-part rates. That is, APS's proposed rate design, for all its complexity, customer impacts (as I discuss below), and potential

1 for confusion does absolutely nothing to move customers' rates closer to the cost of  
2 service.

3 **IV RATE DESIGN: CUSTOMER IMPACT**

4 **Q. DID THE COMPANY EVALUATE THE EFFECT OF ITS RATE DESIGN**  
5 **PROPOSALS ON CUSTOMERS?**

6 A. The Company performed a fairly confusing analysis of the effects of its rate design  
7 proposals on customers. Specifically, the first 41 pages of Schedule H-4 contain some  
8 information about customer impacts, but that information is never summarized or  
9 quantified in a useful manner.

10 **Q. WHAT IS WRONG WITH THE COMPANY'S PRESENTATION IN SCHEDULE**  
11 **H-4?**

12 A. The biggest gaps in the Company's customer-impact analysis are the Company's failures  
13 to present a summary, quantify the number of customers affected, or present information  
14 by customer instead of by bill. For example, on page 2 of Schedule H-4, the Company  
15 shows that an E-12 customer who uses between 0 and 100 kWh in the summer and who  
16 will be moved to the new R-XS rate would have a bill increase of 72.1%. The Company,  
17 however, does not say how many bills would be so affected. It also does not show if  
18 there are customers who have this effect for only one month or if there are customers who  
19 would have this 72% increase for all six summer months. Similarly, the Company does  
20 not break down the impact into more discreet usage levels. For instance, the effect on a  
21 customer using 10 kWh will be different than on a customer using 100 kWh, but that is  
22 not shown on the Company's tables.

23 Moreover, there is nowhere in the Company's presentation where the overall impact on  
24 real customers can be determined. Most of the presentation consists of averages. For

1 example, page 1 of Schedule H-4 shows the average impact for customers moving from  
2 one rate schedule to another. These averages mask the very real impacts on atypical  
3 customers who will face bill impacts very different from the average. These are just  
4 some of the most significant problems with the Company's presentation in Schedule H-4.

5 **Q. DID YOU PREPARE A CUSTOMER IMPACT ANALYSIS THAT PROVIDES**  
6 **ADDITIONAL INFORMATION?**

7 A. Yes, I did. In this portion of my testimony, I will discuss the impact on customers who  
8 do not receive the E-3 or E-4 discount. In the next section, I will discuss the impacts on  
9 discounted customers.

10 **Q. HOW DID YOU PREPARE YOUR CUSTOMER IMPACT ANALYSIS?**

11 A. I used the actual test-year billing data for each full-year customer, as I described above.  
12 This data set contains real-world data for more than 870,000 residential customers for a  
13 full 12 months. By using these data, I was able to determine the annual effect on  
14 customers of moving from the existing rate design to the Company's proposed rate  
15 design. I also will provide some examples to show that customers who would have the  
16 most extreme bill changes are not being moved closer to paying their costs of service.

17 **Q. PLEASE SUMMARIZE THE MAJOR FINDINGS OF YOUR ANALYSIS.**

18 A. My analysis shows that APS's proposed residential rate design would result in annual bill  
19 changes ranging from a 53% decrease to a 168% increase. To put these figures in  
20 context, APS's proposed increase in the residential class's revenue requirement is 19%, so  
21 some customers' bills would increase by more than eight times the average increase,  
22 while other customers would have their annual bills cut in half.



1 **Q. IS IT UNUSUAL OR UNREASONABLE TO HAVE SUCH A DIVERSITY OF**  
2 **CUSTOMER IMPACTS FROM A CHANGE IN RATE DESIGN?**

3 A. Yes, it is. One of the fundamental principles of rate design is the principle of gradualism,  
4 which is also referred to as rate continuity. This principle states that rate changes should  
5 be made gradually so as to avoid extreme customer impacts. The principle is based on  
6 two important concepts. First, customers make other purchase decisions based on energy  
7 costs. For example, whether a customer purchases a more energy-efficient appliance is  
8 based, in part, on the customer's expectation of how his or her electricity costs will  
9 change over time. With an average appliance life of ten years or more (depending on the  
10 type of appliance or equipment), rate continuity is very important. Indeed, more than 50  
11 years ago, Professor James Bonbright explained this fundamental principle as follows:

12 Stability and predictability of the charges for public utility services are  
13 desirable attributes; and up to a certain point -- or rather, up to an  
14 indeterminate point -- they are worth attaining even at the sacrifice of nice  
15 attempts to bring rates into accord with current production costs. Indeed,  
16 unless rate-making policies are sufficiently stable to permit a consumer to  
17 predict with some confidence what his charges will be *if he decides* to  
18 equip his home or his factory to take the contemplated service and then to  
19 buy the service, a cost-price system of rate making will be self-defeating  
20 when viewed as a means of securing a rational control of demand.<sup>2</sup>

21 Second, making dramatic changes in rate design based on the results of a COSS, or other  
22 assumptions about cost relationships, fails to recognize that cost relationships can and do  
23 change over time. Even if a major rate design change were indicated to have rates better  
24 reflect the cost of service (which is not the case here, as I explained in Section III, above),  
25 the principle of rate continuity would suggest that any changes should be made gradually

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<sup>2</sup> James Bonbright, *Principles of Public Utility Rates* (1961), p. 297 (emphasis in original).

1 -- both to be consistent with consumer expectations and to be certain that the cost  
2 relationships are stable.

3 **Q. IS THERE A GENERAL RULE THAT CAN BE USED TO PUT INTO**  
4 **PRACTICE THE PRINCIPLE OF GRADUALISM?**

5 A. Yes, I have been involved in many cases where analysts and decision-makers evaluate the  
6 reasonableness of a rate design (for purposes of gradualism and rate continuity) based on  
7 customer bill impacts in comparison to the class-average increase. The ranges I usually  
8 see vary from 150% to 200% of the class-average percentage increase. That is, that no  
9 customer's bill should be increased by more than, say, 150% of the class-average  
10 increase. For example, where the residential average increase is 19%, no customer's bill  
11 should increase by more than 28.5%. If a range of 200% were used, the maximum  
12 increase to any residential customer would be 38%. I also have seen limitations that set a  
13 lower bound on increases; for example, that no bill should be increased by less than 50%  
14 of the class-average increase, or that no bill should be decreased so long as there are  
15 significant increases in other customers' bills.

16 **Q. HOW DOES THE APS PROPOSAL COMPARE TO THESE GENERAL RULES**  
17 **FOR IMPLEMENTING THE PRINCIPLE OF GRADUALISM?**

18 A. The Company's proposal is grossly inconsistent with well-accepted approaches for  
19 implementing the principle of gradualism. While it might be reasonable to have increases  
20 as high as 1.5 or 2.0 times the class-average percentage increase, the Company's proposal  
21 would increase some customer bills as high as 8.0 times the average increase. Further,  
22 while a reasonable approach to rate design would place a lower limit on any customer's  
23 bill change -- such as no customer receiving a bill decrease if others are receiving  
24 significant increases -- the Company's proposal would result in thousands of customers  
25 receiving bill decreases.

**Q. CAN YOU QUANTIFY THE SPECIFIC BILL IMPACTS FROM THE COMPANY'S PROPOSAL?**

A. Yes. Table 3 shows the range of annual bill increases under the Company's proposed rates.

**Table 3: Range of Annual Bill Increases Under  
APS Proposed Rate Design (Excluding E-3 and E-4 Customers)**

<b>Annual % Increase in Bill</b>	<b>% of Class Average</b>	<b>No. of Customers</b>
Less than 0%	Decrease	29,125
0% to 9.5%	<=50%	77,218
9.5% to 19%	50% to 100%	274,495
19% to 28.5%	100% to 150%	285,032
28.5% to 38%	150% to 200%	121,836
38% to 57%	200 to 300%	66,854
57% to 76%	300% to 400%	9,969
76% to 95%	400% to 500%	3,543
More than 95%	>500%	3,744

Specifically, more than 80,000 customers -- almost one out of every ten customers in the data set -- would face an annual bill increase of more than twice the class-average increase.

**Q. ARE THESE EXTRAORDINARILY LARGE BILL INCREASES NEEDED TO BETTER REFLECT THE COSTS OF SERVING CUSTOMERS?**

A. No, not in every case. To be sure, some of the very large percentage increases are for customers with very low annual bills (less than \$200 per year, for example) whose revenues are less than the cost of service. But there also are thousands of larger uses receiving more than 50% increases in their annual bills where their revenues would move further away from cost than they are under present rates.

Specifically, I queried the database for all customers whose bills would increase by more than 57% and where APS's proposed rates moved the customer further away from cost. I

1 expected to find a few anomalous customers. Out of the approximately 17,000 customers  
2 receiving annual increases of 57% or more (see Table 3), there were more than 1,600  
3 customers who would move further away from cost. As an example, Customer No.  
4 561,958 in the data set pays revenues under present rates of \$1,231.89 per year. I  
5 calculate that the cost of serving the customer (using the methodology I explained in  
6 Section III) is \$1,458.16, so the customer requires an increase almost exactly equal to the  
7 class-average increase (19%) in order to pay bills equal to the cost of serving the  
8 customer. Yet APS is proposing to charge the customer \$2,425.06 per year -- an increase  
9 of 97%. In other words, under the existing rate design with an equal percentage increase,  
10 this customer would pay rates equal to its cost of service, but under APS's proposal, the  
11 customer would pay 66% more than the cost of service. I show the specific calculations  
12 for this customer in Exhibit SJR-3. The same inexplicable result is occurring for more  
13 than 1,600 customers -- they are being asked to pay enormous increases that actually  
14 move the customer further away from paying its cost of service.

15 In Exhibit SJR-4, I provide a listing (using the Customer ID assigned by the Company in  
16 discovery, so no customer can be specifically identified) of each of the more than 1,600  
17 customers in the data set whose bills would increase by more than three times the average  
18 percentage increase, but whose revenues would move further away from cost under  
19 APS's proposal than is the case under present rates. I cannot emphasize enough the  
20 unreasonableness of this result. These customers would pay rates closer to cost if the  
21 Company received no increase at all than they would under APS's proposed rate design  
22 that increases their annual bills by more than 57%.

1 **Q. YOU ALSO SHOWED THAT MORE THAN 29,000 CUSTOMERS WOULD**  
2 **HAVE THEIR ANNUAL BILLS DECREASED UNDER APS'S PROPOSAL. ARE**  
3 **THOSE BILL DECREASES NEEDED IN ORDER TO MOVE RATES CLOSER**  
4 **TO THE COST OF SERVICE?**

5 A. No. To determine whether the bill decreases proposed by APS were needed to move  
6 customers closer to paying their costs, I queried the database to see if there were any  
7 customers receiving decreases whose revenues under present rates were closer to cost  
8 than their revenues under APS proposed rates. I was stunned by the result. Of the  
9 approximately 29,000 customers receiving decreases under APS's proposal, more than  
10 23,000 customers (almost 80%) were moving further away from cost under APS's  
11 proposal. That is, the proposed rate decreases for these customers are not cost-based and  
12 would be subsidized by other customers.

13 **Q. CAN YOU PROVIDE AN EXAMPLE?**

14 A. Yes. As an example, Customer No. 18,953 in the data set pays revenues under present  
15 rates of \$946.21 per year. I calculate that the cost of serving the customer (using the  
16 methodology I explained in Section III) is \$1,087.88, so the customer requires an increase  
17 of about 15% to pay bills equal to the cost of service, just slightly less than the class-  
18 average increase of 19%. Yet APS is proposing to charge the customer only \$648.89 per  
19 year -- a decrease of more than 30%. In other words, under the existing rate design with  
20 an equal percentage increase, this customer would pay rates approximately equal to its  
21 cost of service (a difference of less than \$40 per year), but under APS's proposal, the  
22 customer would pay \$439 less than the cost of service. I show the specific calculations  
23 for this customer in Exhibit SJR-5. The same unreasonable result is occurring for  
24 thousands of customers -- they are receiving annual decreases that are not cost-based.

1 In Exhibit SJR-6, I provide a listing of each of the more than 3,000 customers in the data  
2 set who would receive annual decreases of at least 10% and who would move further  
3 away from cost under APS's proposal than is the case under present rates. To save paper,  
4 I did not print the 20,000 additional customers who would receive decreases between 0%  
5 and 10% and who also would move further from cost. I cannot emphasize enough the  
6 unreasonableness of this result. These customers would pay rates closer to cost if the  
7 Company received no increase at all than they would under APS's proposed rate design.  
8 Other residential customers are being asked to subsidize these rate decreases that are  
9 contrary to cost-based ratemaking principles; the decreases exist solely because APS has  
10 an untested theory about a different way to design rates.

11 **Q. WHAT DO YOU CONCLUDE ABOUT THE CUSTOMER IMPACTS FROM**  
12 **THE COMPANY'S PROPOSED RATE DESIGN?**

13 A. I conclude that the customer impacts from the Company's proposed rate design are  
14 extraordinarily large, unreasonable, and unnecessary to move rates closer to recovering  
15 the cost of service. These are real people that APS would affect with its proposal. If the  
16 proposal were based on some discernible regulatory benefit (such as moving revenues  
17 closer to costs), then it might be appropriate to start a gradual movement in the direction  
18 APS proposes. But that is not the case here. APS's proposed rate design does not make  
19 any progress toward having rates better reflect the cost of serving customers. Thus, there  
20 is absolutely no benefit from APS's proposed rate design changes. Simply stated,  
21 thousands of customers would be forced to pay extraordinarily large increases in their  
22 electric bills without moving their rates closer to the cost of service. Thousands of other  
23 customers would receive unwarranted reductions in their annual bills; reductions that  
24 would move them further away from paying their cost of service.



**RATE DESIGN: LOW-INCOME AND MEDICAL-DISCOUNT CUSTOMERS**

**Q. DOES APS HAVE SPECIAL RATES FOR LOW-INCOME CUSTOMERS AND CUSTOMERS WHO NEED ASSISTANCE PAYING FOR ELECTRICITY BECAUSE OF MEDICAL NEEDS?**

A. Yes. The E-3 rider provides a discount to certified low-income customers. The E-4 rider provides a discount to medical-aid customers. Under present rates, the E-3 and E-4 discounts vary based on the amount of electricity consumed in a month. The percentage discount is reduced as the customer's consumption increases. Table 4 shows the existing discounts.

**Table 4: Existing E-3 and E-4 Discount Structure**

<b>Discount</b>	<b>E-3 Monthly Usage Band</b>	<b>E-4 Monthly Usage Band</b>
65%	0 to 400 kWh	0 to 800 kWh
45%	401 to 800 kWh	801 to 1,400 kWh
26%	801 to 1,200 kWh	1,401 to 2,000 kWh
\$31.75 for the month	Over 1,200 kWh	
\$60.00 for the month		Over 2,000 kWh

It should be emphasized that these discounts are not like blocked rates where everyone pays the same amount for the first 400 kWh, then pays a different amount for the next 400 kWh, for example. Under the E-3 and E-4 discounts, the discount on the total bill changes if a customer moves from one usage band to the next. Thus, for example, if an E-3 customer uses 399 kWh, he will receive a 65% discount on his total bill that month. If his neighbor is also an E-3 customer and uses 401 kWh, she will receive a 45% discount on her total bill for that month.

**Q. IS THIS A TYPICAL WAY TO STRUCTURE A LOW-INCOME DISCOUNT?**

A. No. Based on my experience in other states and my general familiarity with utility affordability programs, this is a very unusual type of discount structure. More typical



1 low-income rates are based on either a standard percentage discount that applies to all  
2 customers' bills (or portions of bills; for example, discounting only the customer charge  
3 or discounting only the usage charge); or a percentage-of-income program that sets the  
4 bill to be affordable based on each customer's verified income.

5 **Q. IS THE CURRENT STRUCTURE OF THE E-3 AND E-4 RATES FAIR TO**  
6 **CUSTOMERS?**

7 A. No. As I mentioned above, a change of a few kWh in a month can result in a significant  
8 change in the discount received by the customer. I calculated the bills for each full-year  
9 E-3 and E-4 customer under present rates, with and without the discount. I calculate that  
10 under the existing discount structure the E-3 discounts range from 10% to 65% of the bill,  
11 and the E-4 discounts range from 15% to 65% of the bill. If the purpose of the discount  
12 programs is to enhance the ability of customers to afford their bills, it is not reasonable to  
13 have such a wide range of discounts, and to have the discount percentage vary with total  
14 electricity usage. It is well-established that household energy consumption is based, in  
15 part, on the number of people living in the household.<sup>3</sup> It does not enhance the ability of  
16 households to afford their energy bills if households with more people (and thus higher  
17 energy consumption) receive smaller percentage discounts than households with fewer  
18 people.

19 **Q. IS APS PROPOSING TO CHANGE THE STRUCTURE OF THE E-3 AND E-4**  
20 **DISCOUNTS?**

21 A. Yes. APS is proposing to change both discounts to a flat dollar discount for all eligible  
22 customers. Specifically, APS is proposing to make the E-3 discount \$1.12 per day, but

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<sup>3</sup> See, e.g., U.S. Energy Information Administration, Residential Energy Consumption Survey for 2009, tables CE 3.5 and CE 3.10 (household energy use and household energy expenditures, respectively, for the West Region).

1 no more than 80% of the total bill. Similarly, it is proposing to change the E-4 discount  
2 to \$1.87 per day, but no more than 80% of the bill.

3 **Q. DOES APS'S PROPOSAL ADDRESS YOUR CONCERN WITH DIFFERENT**  
4 **HOUSEHOLDS RECEIVING DIFFERENT PERCENTAGE REDUCTIONS IN**  
5 **THEIR BILLS?**

6 A. No. APS's proposal actually exacerbates the problem. I calculate that APS's proposal  
7 would result in E-3 discounts ranging from 5% to 80% of the customer's total bill; and  
8 E-4 discounts ranging from 12% to 80% of the bill. Thus, some customers -- especially  
9 those with larger families (and thus more electricity consumption) -- would receive  
10 smaller discounts than they receive today, while others -- primarily one- or two-person  
11 households with low energy consumption -- would receive larger discounts than they do  
12 today. While I agree with APS that the discount structure should be simplified, it should  
13 be simplified in a way that is fair to all customers who need assistance.

14 **Q. HAVE YOU DETERMINED THE COMBINED EFFECT ON E-3 AND E-4**  
15 **CUSTOMERS OF APS'S PROPOSED CHANGES IN RATE DESIGN AND**  
16 **PROPOSED CHANGES IN THE DISCOUNTS?**

17 A. Yes. Using the same methodology I described above, I evaluated the impacts on all full-  
18 year E-3 and E-4 customers from APS's proposals in this case.

19 **Q. PLEASE SUMMARIZE YOUR FINDINGS.**

20 A. I will begin with E-3 (low-income) customers. I found that when taking into account the  
21 combined effect of the Company's proposed changes in rate design and its proposed  
22 changes in the E-3 discount, low-income customers would see annual bill changes  
23 ranging from a 58% decrease to a 178% increase. This is an even more disparate impact  
24 than is faced by undiscounted customers (annual bill changes ranging from -53% to

+168%, as I described above). Table 5 shows the ranges of annual bill impacts on the approximately 78,000 full-year E-3 customers in the data set.

**Table 5: Range of Annual Bill Increases Under  
APS Proposed Rate Design for E-3 (Low Income) Customers**

<b>Annual % Increase in Bill</b>	<b>% of Class Average</b>	<b>No. of Customers</b>
Less than 0%	Decrease	8,549
0% to 9.5%	0% to 50%	12,350
9.5% to 19%	50% to 100%	19,448
19% to 28.5%	100% to 150%	17,461
28.5% to 38%	150% to 200%	10,027
38% to 57%	200 to 300%	7,557
57% to 76%	300% to 400%	2,033
76% to 95%	400% to 500%	480
More than 95%	>500%	103

In other words, more than 10,000 of the 78,000 low-income customers in the dataset would see their annual bills increase by more than 38% -- more than twice the class average increase.

**Q. ARE THE EFFECTS OF THE COMPANY'S PROPOSAL FOR MEDICAL-AID CUSTOMERS SIMILAR?**

A. The effects on customers who qualify for a medical device discount are similar but slightly less extreme than are the impacts on low-income customers. The range of annual bill impacts for these customers, taking into account the Company's proposed rate design changes and the change in the E-4 discount, go from a decrease of 38% to an increase of 127%. As was the case with low-income customers, there are numerous E-4 customers who would receive exorbitant increases in their annual bills under the Company's proposals, as shown in Table 6.

**Table 6: Range of Annual Bill Increases Under  
APS Proposed Rate Design for E-4 (Medical Assistance) Customers**

<b>Annual % Increase in Bill</b>	<b>% of Class Average</b>	<b>No. of Customers</b>
Less than 0%	Decrease	249
0% to 9.5%	0% to 50%	126
9.5% to 19%	50% to 100%	219
19% to 28.5%	100% to 150%	326
28.5% to 38%	150% to 200%	178
38% to 57%	200 to 300%	114
57% to 76%	300% to 400%	24
76% to 95%	400% to 500%	5
More than 95%	>500%	5

While there are only about 1,200 E-4 customers in the dataset, more than 10% of them would face annual increases in excess of 38% under the Company's proposals.

**Q. WHAT DO YOU CONCLUDE ABOUT THE EFFECTS OF THE COMPANY'S PROPOSALS ON E-3 AND E-4 CUSTOMERS?**

A. I conclude that the Company's proposals would have devastating effects on some E-3 and E-4 customers. Thousands of customers who already are having difficulty paying their electric bills would see their bills increase by 38% or more under the Company's proposals, more than twice the increase in the revenue requirement. At its most extreme, some of the Company's neediest customers would have their annual bills more than double. As I explained above, there is no reason for this to happen. The Company's proposals do not move residential customers closer to paying the cost of service and are not fairer to customers than the existing rate structure.

**Q. WHAT DO YOU RECOMMEND FOR THE E-3 AND E-4 DISCOUNTS?**

A. I recommend that the E-3 and E-4 discounts be restructured to give each eligible customer the same percentage discount on the customer's total bill. This is the fairest way to provide assistance to a large number of customers. Based on the current costs of

1       these programs, I recommend that the E-3 (low income) discount be set at 30% of the  
2       total bill and that the E-4 (medical device) discount be set at 40% of the total bill.<sup>4</sup> In this  
3       way, larger families who are likely to use more electricity would receive more dollar  
4       assistance (though the same percentage assistance) than would smaller families who are  
5       likely to use less electricity. This type of structure greatly simplifies the discount  
6       programs and makes it easier for customers to know what to expect on their bills.

7       **VI     RATE DESIGN: CONCLUSIONS AND RECOMMENDATIONS**

8       **Q.     YOUR TESTIMONY SHOWS SOME EXTRAORDINARY RESULTS, SUCH AS**  
9       **VERY LARGE INCREASES IN CUSTOMERS' BILLS WITHOUT ANY**  
10       **IMPROVEMENT IN REFLECTING THE COST OF SERVICE. DO YOU HAVE**  
11       **ANY OPINIONS ABOUT HOW THIS HAPPENED?**

12       **A.**    It appears that the source of APS's unreasonable proposal lies in two factors. First, APS  
13       and its consultants relied on unsubstantiated theory instead of real-world information.  
14       Dr. Faruqui admitted that he did not conduct any analysis of the relationship between  
15       revenues and costs, contenting himself with his belief that rates with something called a  
16       "demand charge" must immutably result in a better reflection of costs than rates that do  
17       not have a charge called "demand." I demonstrated in Section III that Dr. Faruqui's  
18       unsupported assumption turns out to be incorrect when the actual data for APS are  
19       analyzed.

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<sup>4</sup> APS's workpapers show that in 2015 E-3 customers received an average discount of \$33.93 per month, or \$407.19 per year. File: Attachment CAM-11DR Annualize Customer Levels.xlsx, Discounts tab. I calculate from APS's billing dataset that the average E-3 customer in 2015 would have received undiscounted bills totaling \$1,371.21 per year. Thus, the E-3 discount represents an average discount of  $\$407.19 \div \$1,371.21 = 29.70\%$ . The same workpaper and dataset for E-4 customers shows an average discount of \$57.11 per month, or \$685.28 annually, compared to an average undiscounted annual bill of \$1,706.25 per year. So the average E-4 discount in 2015 was  $\$685.28 \div \$1,706.25 = 40.16\%$ .

1 Dr. Faruqui's failure to analyze any APS-specific data was compounded by APS's  
2 apparent failure to rigorously evaluate customer impacts from its proposal. From the  
3 documents APS filed, it appears that it never looked at the overall effects of its proposal  
4 on real customers; it never asked how many customers would have bill increases of 3 or 4  
5 or 5 times the average increase, or whether there might be a way to avoid such a  
6 devastating result. Incredibly, even after designing the new rates, neither APS nor its  
7 consultants ever went back and evaluated whether the new rates, in fact, moved  
8 customers closer to the cost of service.

9 **Q. WHAT DO YOU CONCLUDE ABOUT THE COMPANY'S PROPOSED**  
10 **RESIDENTIAL RATE DESIGN?**

11 A. I conclude that APS's proposed residential rate design is unreasonable and must not be  
12 adopted by the Commission. The proposal would not improve the relationship between  
13 revenues and costs as compared to the existing rate design. Despite this lack of  
14 improvement, however, the Company's proposal would result in devastating,  
15 unnecessary, and unreasonable impacts on customers, with some customers seeing their  
16 bills more than double.

17 **Q. WHAT DO YOU CONCLUDE ABOUT THE COMPANY'S PROPOSAL TO**  
18 **RESTRUCTURE THE LOW-INCOME AND MEDICAL-AID DISCOUNTS?**

19 A. I conclude that the Company's proposal to restructure the E-3 and E-4 discounts is not  
20 reasonable. While I support the Company's goal of simplifying these discount programs,  
21 the proposal to provide each customer with the same dollar discount would serve to  
22 reduce the discount received by many customers, especially those with larger families  
23 who are likely to use more electricity than the typical low-income customer. Further, the  
24 combined effect of the Company's proposed rate design changes and the changes in the  
25 discount programs would be devastating to many customers. It is not reasonable to ask



1 customers with affordability concerns to pay increases of 40%, 50%, or even more when  
2 the revenue requirement is increasing (according to APS) by less than 20%. Such results  
3 are unreasonable, and not needed to collect the Company's proposed revenue requirement  
4 in a cost-based manner.

5 **Q. WHAT DO YOU RECOMMEND?**

6 A. I recommend that the Commission change all residential rates by the same percentage. In  
7 this testimony, I have used a 19% increase in all residential rates to represent the  
8 Company's revenue requirement proposal. I understand that other parties have filed  
9 testimony suggesting a large range of potential revenue-requirement outcomes in this  
10 case. Whatever result is reached on the revenue requirement, when the new revenue  
11 requirement is allocated to the residential class, all residential rates should be changed by  
12 the same percentage to achieve the class's revenue requirement. Such a rate design would  
13 result in rates that bear the same relationship to the cost of service as does the Company's  
14 proposal, but it would avoid all of the disparate bill impacts that would exist if the  
15 Company's proposal were implemented.

16 Further, I recommend that the Commission restructure the E-3 and E-4 discounts to  
17 provide total bill discounts of 30% and 40%, respectively. This approach simplifies the  
18 discount programs, enhances customers' ability to understand and forecast their electricity  
19 bills, provides a result that is fair to all eligible customers, and would cost approximately  
20 the same as the current discount structure.

21 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

22 A. Yes, it does.



## Appendix A

**Scott J. Rubin**

Attorney + Consultant

333 Oak Lane • Bloomsburg, PA 17815

### **Current Position**

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Public Utility Attorney and Consultant. 1994 to present. I provide legal, consulting, and expert witness services to various organizations interested in the regulation of public utilities.

### **Previous Positions**

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Lecturer in Computer Science, Susquehanna University, Selinsgrove, PA. 1993 to 2000.

Senior Assistant Consumer Advocate, Office of Consumer Advocate, Harrisburg, PA. 1990 to 1994.

I supervised the administrative and technical staff and shared with one other senior attorney the supervision of a legal staff of 14 attorneys.

Assistant Consumer Advocate, Office of Consumer Advocate, Harrisburg, PA. 1983 to 1990.

Associate, Laws and Staruch, Harrisburg, PA. 1981 to 1983.

Law Clerk, U.S. Environmental Protection Agency, Washington, DC. 1980 to 1981.

Research Assistant, Rockville Consulting Group, Washington, DC. 1979.

### **Current Professional Activities**

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Member, American Bar Association, Infrastructure and Regulated Industries Section.

Member, American Water Works Association.

Admitted to practice law before the Supreme Court of Pennsylvania, the New York State Court of Appeals, the United States District Court for the Middle District of Pennsylvania, the United States Court of Appeals for the Third Circuit, and the Supreme Court of the United States.

### **Previous Professional Activities**

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Member, American Water Works Association, Rates and Charges Subcommittee, 1998-2001.

Member, Federal Advisory Committee on Disinfectants and Disinfection By-Products in Drinking Water, U.S. Environmental Protection Agency, Washington, DC. 1992 to 1994.

Chair, Water Committee, National Association of State Utility Consumer Advocates, Washington, DC. 1990 to 1994; member of committee from 1988 to 1990.

Member, Board of Directors, Pennsylvania Energy Development Authority, Harrisburg, PA. 1990 to 1994.

Member, Small Water Systems Advisory Committee, Pennsylvania Department of Environmental Resources, Harrisburg, PA. 1990 to 1992.

Member, Ad Hoc Committee on Emissions Control and Acid Rain Compliance, National Association of State Utility Consumer Advocates, 1991.

Member, Nitrogen Oxides Subcommittee of the Acid Rain Advisory Committee, U.S. Environmental Protection Agency, Washington DC. 1991.

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**Education**

J.D. with Honors, George Washington University, Washington, DC. 1981.

B.A. with Distinction in Political Science, Pennsylvania State University, University Park, PA. 1978.

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**Publications and Presentations (\* denotes peer-reviewed publications)**

1. "Quality of Service Issues," a speech to the Pennsylvania Public Utility Commission Consumer Conference, State College, PA. 1988.
2. K.L. Pape and S.J. Rubin, "Current Developments in Water Utility Law," in *Pennsylvania Public Utility Law* (Pennsylvania Bar Institute). 1990.
3. Presentation on Water Utility Holding Companies to the Annual Meeting of the National Association of State Utility Consumer Advocates, Orlando, FL. 1990.
4. "How the OCA Approaches Quality of Service Issues," a speech to the Pennsylvania Chapter of the National Association of Water Companies. 1991.
5. Presentation on the Safe Drinking Water Act to the Mid-Year Meeting of the National Association of State Utility Consumer Advocates, Seattle, WA. 1991.
6. "A Consumer Advocate's View of Federal Pre-emption in Electric Utility Cases," a speech to the Pennsylvania Public Utility Commission Electricity Conference. 1991.
7. Workshop on Safe Drinking Water Act Compliance Issues at the Mid-Year Meeting of the National Association of State Utility Consumer Advocates, Washington, DC. 1992.
8. Formal Discussant, Regional Acid Rain Workshop, U.S. Environmental Protection Agency and National Regulatory Research Institute, Charlotte, NC. 1992.
9. S.J. Rubin and S.P. O'Neal, "A Quantitative Assessment of the Viability of Small Water Systems in Pennsylvania," *Proceedings of the Eighth NARUC Biennial Regulatory Information Conference*, National Regulatory Research Institute (Columbus, OH 1992), IV:79-97.
10. "The OCA's Concerns About Drinking Water," a speech to the Pennsylvania Public Utility Commission Water Conference. 1992.
11. Member, Technical Horizons Panel, Annual Meeting of the National Association of Water Companies, Hilton Head, SC. 1992.
12. M.D. Klein and S.J. Rubin, "Water and Sewer -- Update on Clean Streams, Safe Drinking Water, Waste Disposal and Pennvest," *Pennsylvania Public Utility Law Conference* (Pennsylvania Bar Institute). 1992.
13. Presentation on Small Water System Viability to the Technical Assistance Center for Small Water Companies, Pa. Department of Environmental Resources, Harrisburg, PA. 1993

14. "The Results Through a Public Service Commission Lens," speaker and participant in panel discussion at Symposium: "Impact of EPA's Allowance Auction," Washington, DC, sponsored by AER\*X. 1993.
15. "The Hottest Legislative Issue of Today -- Reauthorization of the Safe Drinking Water Act," speaker and participant in panel discussion at the Annual Conference of the American Water Works Association, San Antonio, TX. 1993.
16. "Water Service in the Year 2000," a speech to the Conference: "Utilities and Public Policy III: The Challenges of Change," sponsored by the Pennsylvania Public Utility Commission and the Pennsylvania State University, University Park, PA. 1993.
17. "Government Regulation of the Drinking Water Supply: Is it Properly Focused?," speaker and participant in panel discussion at the National Consumers League's Forum on Drinking Water Safety and Quality, Washington, DC. 1993. Reprinted in *Rural Water*, Vol. 15 No. 1 (Spring 1994), pages 13-16.
18. "Telephone Penetration Rates for Renters in Pennsylvania," a study prepared for the Pennsylvania Office of Consumer Advocate. 1993.
19. "Zealous Advocacy, Ethical Limitations and Considerations," participant in panel discussion at "Continuing Legal Education in Ethics for Pennsylvania Lawyers," sponsored by the Office of General Counsel, Commonwealth of Pennsylvania, State College, PA. 1993.
20. "Serving the Customer," participant in panel discussion at the Annual Conference of the National Association of Water Companies, Williamsburg, VA. 1993.
21. "A Simple, Inexpensive, Quantitative Method to Assess the Viability of Small Water Systems," a speech to the Water Supply Symposium, New York Section of the American Water Works Association, Syracuse, NY. 1993.
22. \* S.J. Rubin, "Are Water Rates Becoming Unaffordable?," *Journal American Water Works Association*, Vol. 86, No. 2 (February 1994), pages 79-86.
23. "Why Water Rates Will Double (If We're Lucky): Federal Drinking Water Policy and Its Effect on New England," a briefing for the New England Conference of Public Utilities Commissioners, Andover, MA. 1994.
24. "Are Water Rates Becoming Unaffordable?," a speech to the Legislative and Regulatory Conference, Association of Metropolitan Water Agencies, Washington, DC. 1994.
25. "Relationships: Drinking Water, Health, Risk and Affordability," speaker and participant in panel discussion at the Annual Meeting of the Southeastern Association of Regulatory Commissioners, Charleston, SC. 1994.
26. "Small System Viability: Assessment Methods and Implementation Issues," speaker and participant in panel discussion at the Annual Conference of the American Water Works Association, New York, NY. 1994.
27. S.J. Rubin, "How much should we spend to save a life?," *Seattle Journal of Commerce*, August 18, 1994 (Protecting the Environment Supplement), pages B-4 to B-5.

28. S. Rubin, S. Bernow, M. Fulmer, J. Goldstein, and I. Peters, *An Evaluation of Kentucky-American Water Company's Long-Range Planning*, prepared for the Utility and Rate Intervention Division, Kentucky Office of the Attorney General (Tellus Institute 1994).
29. S.J. Rubin, "Small System Monitoring: What Does It Mean?," *Impacts of Monitoring for Phase II/V Drinking Water Regulations on Rural and Small Communities* (National Rural Water Association 1994), pages 6-12.
30. "Surviving the Safe Drinking Water Act," speaker at the Annual Meeting of the National Association of State Utility Consumer Advocates, Reno, NV. 1994.
31. "Safe Drinking Water Act Compliance -- Ratemaking Implications," speaker at the National Conference of Regulatory Attorneys, Scottsdale, AZ. 1995. Reprinted in *Water*, Vol. 36, No. 2 (Summer 1995), pages 28-29.
32. S.J. Rubin, "Water: Why Isn't it Free? The Case of Small Utilities in Pennsylvania," *Utilities, Consumers & Public Policy: Issues of Quality, Affordability, and Competition, Proceedings of the Fourth Utilities, Consumers and Public Policy Conference* (Pennsylvania State University 1995), pages 177-183.
33. S.J. Rubin, "Water Rates: An Affordable Housing Issue?," *Home Energy*, Vol. 12 No. 4 (July/August 1995), page 37.
34. Speaker and participant in the Water Policy Forum, sponsored by the National Association of Water Companies, Naples, FL. 1995.
35. Participant in panel discussion on "The Efficient and Effective Maintenance and Delivery of Potable Water at Affordable Rates to the People of New Jersey," at The New Advocacy: Protecting Consumers in the Emerging Era of Utility Competition, a conference sponsored by the New Jersey Division of the Ratepayer Advocate, Newark, NJ. 1995.
36. J.E. Cromwell III, and S.J. Rubin, *Development of Benchmark Measures for Viability Assessment* (Pa. Department of Environmental Protection 1995).
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**Testimony as an Expert Witness**

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12. *In the Matter of the Application of Potomac Electric Power Company for Approval of its Third Least-Cost Plan*, D.C. Public Service Commission, Formal Case No. 917, Phase II. 1995. Concerning Clean Air Act implementation and environmental externalities, on behalf of the District of Columbia Office of the People's Counsel.
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  15. *Winter Harbor Water Company, Proposed Schedule Revisions to Introduce a Readiness-to-Serve Charge*, Maine Public Utilities Commission, Docket No. 95-271. 1995 and 1996. Concerning standards for, and the reasonableness of, imposing a readiness to serve charge and/or exit fee on the customers of a small investor-owned water utility, on behalf of the Maine Public Advocate.
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33. *Central Maine Power Company Investigation of Stranded Costs, Transmission and Distribution Utility Revenue Requirements, and Rate Design*, Maine Public Utilities Commission, Docket No. 97-580. 1998. Concerning the treatment of existing rate discounts when designing rates for a transmission and distribution electric utility, on behalf of the Maine Public Advocate.
34. *Pa. Public Utility Commission v. Manufacturers Water Company*, Pennsylvania Public Utility Commission, Docket No. R-00984275. 1998. Concerning rate design on behalf of the Manufacturers Water Industrial Users.
35. *In the Matter of Petition of Pennsgrove Water Supply Company for an Increase in Rates for Water Service*, New Jersey Board of Public Utilities, Docket No. WR98030147. 1998. Concerning the revenue requirements, level of affiliated charges, and rate design for a water utility, on behalf of the New Jersey Division of Ratepayer Advocate.
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41. *Northern Utilities, Inc., Petition for Waivers from Chapter 820*, Maine Public Utilities Commission, Docket No. 99-254. 2000. Concerning the standards and requirements for defining and separating a natural gas utility's core and non-core business functions, on behalf of the Maine Public Advocate.

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43. *In the Matter of the Petition of Gordon's Corner Water Company for an Increase in Rates and Charges for Water Service*, New Jersey Board of Public Utilities, Docket No. WR00050304. 2000. Concerning the revenue requirements and rate design for a water utility, on behalf of the New Jersey Division of Ratepayer Advocate.
44. *Testimony concerning Arsenic in Drinking Water: An Update on the Science, Benefits, and Costs*, Committee on Science, United States House of Representatives. 2001. Concerning the effects on low-income households and small communities from a more stringent regulation of arsenic in drinking water.
45. *In the Matter of the Application of The Cincinnati Gas & Electric Company for an Increase in Gas Rates in its Service Territory*, Public Utilities Commission of Ohio, Case No. 01-1228-GA-AIR, *et al.* 2002. Concerning the need for and structure of a special rider and alternative form of regulation for an accelerated main replacement program, on behalf of the Ohio Consumers' Counsel.
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47. *An Investigation into the Feasibility and Advisability of Kentucky-American Water Company's Proposed Solution to its Water Supply Deficit*, Kentucky Public Service Commission, Case No. 2001-00117. 2002. Concerning water supply planning, regulatory oversight, and related issue, on behalf of the Kentucky Office of Attorney General.
48. *Joint Application of Pennsylvania-American Water Company and Thames Water Aqua Holdings GmbH*, Pennsylvania Public Utility Commission, Docket Nos. A-212285F0096 and A-230073F0004. 2002. Concerning the risks and benefits associated with the proposed acquisition of a water utility, on behalf of the Pennsylvania Office of Consumer Advocate.
49. *Application for Approval of the Transfer of Control of Kentucky-American Water Company to RWE AG and Thames Water Aqua Holdings GmbH*, Kentucky Public Service Commission, Case No. 2002-00018. 2002. Concerning the risks and benefits associated with the proposed acquisition of a water utility, on behalf of the Kentucky Office of Attorney General.
50. *Joint Petition for the Consent and Approval of the Acquisition of the Outstanding Common Stock of American Water Works Company, Inc., the Parent Company and Controlling Shareholder of West Virginia-American Water Company*, West Virginia Public Service Commission, Case No. 01-1691-W-PC. 2002. Concerning the risks and benefits associated with the proposed acquisition of a water utility, on behalf of the Consumer Advocate Division of the West Virginia Public Service Commission.
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54. *West Virginia-American Water Company*, West Virginia Public Service Commission, Case No. 03-0353-W-42T. 2003. Concerning affordability, rate design, and cost of service issues, on behalf of the West Virginia Consumer Advocate Division.
55. *Petition of Seabrook Water Corp. for an Increase in Rates and Charges for Water Service*, New Jersey Board of Public Utilities, Docket No. WR3010054. 2003. Concerning revenue requirements, rate design, prudence, and regulatory policy, on behalf of the New Jersey Division of Ratepayer Advocate.
56. *Chesapeake Ranch Water Co. v. Board of Commissioners of Calvert County*, U.S. District Court for Southern District of Maryland, Civil Action No. 8:03-cv-02527-AW. 2004. Submitted expert report concerning the expected level of rates under various options for serving new commercial development, on behalf of the plaintiff.
57. *Testimony concerning Lead in Drinking Water*, Committee on Government Reform, United States House of Representatives. 2004. Concerning the trade-offs faced by low-income households when drinking water costs increase, including an analysis of H.R. 4268.
58. *West Virginia-American Water Company*, West Virginia Public Service Commission, Case No. 04-0373-W-42T. 2004. Concerning affordability and rate comparisons, on behalf of the West Virginia Consumer Advocate Division.
59. *West Virginia-American Water Company*, West Virginia Public Service Commission, Case No. 04-0358-W-PC. 2004. Concerning costs, benefits, and risks associated with a wholesale water sales contract, on behalf of the West Virginia Consumer Advocate Division.
60. *Kentucky-American Water Company*, Kentucky Public Service Commission, Case No. 2004-00103. 2004. Concerning rate design and tariff issues, on behalf of the Kentucky Office of Attorney General.
61. *New Landing Utility, Inc.*, Illinois Commerce Commission, Docket No. 04-0610. 2005. Concerning the adequacy of service provided by, and standards of performance for, a water and wastewater utility, on behalf of the Illinois Office of Attorney General.
62. *People of the State of Illinois v. New Landing Utility, Inc.*, Circuit Court of the 15<sup>th</sup> Judicial District, Ogle County, Illinois, No. 00-CH-97. 2005. Concerning the standards of performance for a water and wastewater utility, including whether a receiver should be appointed to manage the utility's operations, on behalf of the Illinois Office of Attorney General.
63. *Hope Gas, Inc. d/b/a Dominion Hope*, West Virginia Public Service Commission, Case No. 05-0304-G-42T. 2005. Concerning the utility's relationships with affiliated companies, including an appropriate level of revenues and expenses associated with services provided to and received from affiliates, on behalf of the West Virginia Consumer Advocate Division.

64. *Monongahela Power Co. and The Potomac Edison Co.*, West Virginia Public Service Commission, Case Nos. 05-0402-E-CN and 05-0750-E-PC. 2005. Concerning review of a plan to finance the construction of pollution control facilities and related issues, on behalf of the West Virginia Consumer Advocate Division.
65. *Joint Application of Duke Energy Corp., et al., for Approval of a Transfer and Acquisition of Control*, Case Kentucky Public Service Commission, No. 2005-00228. 2005. Concerning the risks and benefits associated with the proposed acquisition of an energy utility, on behalf of the Kentucky Office of the Attorney General.
66. *Commonwealth Edison Company proposed general revision of rates, restructuring and price unbundling of bundled service rates, and revision of other terms and conditions of service*, Illinois Commerce Commission, Docket No. 05-0597. 2005. Concerning rate design and cost of service, on behalf of the Illinois Office of Attorney General.
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68. *Central Illinois Light Company d/b/a AmerenCILCO, Central Illinois Public Service Company d/b/a AmerenCIPS, and Illinois Power Company d/b/a AmerenIP, proposed general increases in rates for delivery service*, Illinois Commerce Commission, Docket Nos. 06-0070, et al. 2006. Concerning rate design and cost of service, on behalf of the Illinois Office of Attorney General.
69. *Grens, et al., v. Illinois-American Water Co.*, Illinois Commerce Commission, Docket Nos. 5-0681, et al. 2006. Concerning utility billing, metering, meter reading, and customer service practices, on behalf of the Illinois Office of Attorney General and the Village of Homer Glen, Illinois.
70. *Commonwealth Edison Company Petition for Approval of Tariffs Implementing ComEd's Proposed Residential Rate Stabilization Program*, Illinois Commerce Commission, Docket No. 06-0411. 2006. Concerning a utility's proposed purchased power phase-in proposal, in behalf of the Illinois Office of Attorney General.
71. *Illinois-American Water Company, Application for Approval of its Annual Reconciliation of Purchased Water and Purchased Sewage Treatment Surcharges Pursuant to 83 Ill. Adm. Code 655*, Illinois Commerce Commission, Docket No. 06-0196. 2006. Concerning the reconciliation of purchased water and sewer charges, on behalf of the Illinois Office of Attorney General and the Village of Homer Glen, Illinois.
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80. *Adjustment of the Rates of Kentucky-American Water Company*, Kentucky Public Service Commission, Case No. 2007-00143. 2007. Concerning rate design and cost of service, on behalf of the Kentucky Office of Attorney General.
81. *Application of Kentucky-American Water Company for a Certificate of Convenience and Necessity Authorizing the Construction of Kentucky River Station II, Associated Facilities and Transmission Main*, Kentucky Public Service Commission, Case No. 2007-00134. 2007. Concerning the life-cycle costs of a planned water supply source and the imposition of conditions on the construction of that project, on behalf of the Kentucky Office of Attorney General.
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85. *Pa. Public Utility Commission v. Aqua Pennsylvania Inc.*, Pennsylvania Public Utility Commission, Docket No. R-00072711. 2008. Concerning rate design, on behalf of the Masthope Property Owners Council.
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90. *In the Matter of the Application of The East Ohio Gas Company d/b/a Dominion East Ohio for Authority to Increase Rates for its Gas Service*, Public Utilities Commission of Ohio, Case Nos. 07-829-GA-AIR, et al. 2008. Concerning the need for, and structure of, an accelerated infrastructure replacement program and rate surcharge, on behalf of the Office of the Ohio Consumers' Counsel.
91. *Pa. Public Utility Commission v. Pennsylvania American Water Company*, Pennsylvania Public Utility Commission, Docket No. R-2008-2032689. 2008. Concerning rate design, cost of service study, and other tariff issues, on behalf of the Pennsylvania Office of Consumer Advocate.
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93. *Northern Illinois Gas Company d/b/a Nicor Gas Company*, Illinois Commerce Commission, Docket No. 08-0363. 2008. Concerning rate design, cost of service, and automatic rate adjustments, on behalf of the Illinois Office of Attorney General.
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98. *Illinois-American Water Company Proposed Increase in Water and Sewer Rates*, Illinois Commerce Commission, Docket No. 09-0319. 2009. Concerning rate design and cost of service on behalf of the Illinois Office of Attorney General and Citizens Utility Board.
99. *Pa. Public Utility Commission v. Aqua Pennsylvania Inc.*, Pennsylvania Public Utility Commission, Docket No. R-2009-2132019. 2010. Concerning rate design, cost of service, and automatic adjustment tariffs, on behalf of the Pennsylvania Office of Consumer Advocate.
100. *Apple Canyon Utility Company and Lake Wildwood Utilities Corporation Proposed General Increases in Water Rates*, Illinois Commerce Commission, Docket Nos. 09-0548 and 09-0549. 2010. Concerning parent-company charges, quality of service, and other matters, on behalf of Apple Canyon Lake Property Owners' Association and Lake Wildwood Association, Inc.
101. *Application of Aquarion Water Company of Connecticut to Amend its Rate Schedules*, Connecticut Department of Public Utility Control, Docket No. 10-02-13. 2010. Concerning rate design, proof of revenues, and other tariff issues, on behalf of the Connecticut Office of Consumer Counsel.
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103. *Pa. Public Utility Commission v. Pennsylvania-American Water Co.*, Pennsylvania Public Utility Commission, Docket Nos. R-2010-2166212, et al. 2010. Concerning rate design and cost of service study for four wastewater utility districts, on behalf of the Pennsylvania Office of Consumer Advocate.
104. *Central Illinois Light Company d/b/a AmerenCILCO, Central Illinois Public Service Company d/b/a AmerenCIPS, Illinois Power Company d/b/a AmerenIP Petition for accounting order*, Illinois Commerce Commission, Docket No. 10-0517. 2010. Concerning ratemaking procedures for a multi-district electric and natural gas utility, on behalf of the Illinois Office of Attorney General.
105. *Commonwealth Edison Company Petition for General Increase in Delivery Service Rates*, Illinois Commerce Commission Docket No. 10-0467. 2010. Concerning rate design and cost of service study, on behalf of the Illinois Office of Attorney General.
106. *Pa. Public Utility Commission v. City of Lancaster Bureau of Water*, Pennsylvania Public Utility Commission, Docket No. R-2010-2179103. 2010. Concerning rate design, cost of service, and cost allocation, on behalf of the Pennsylvania Office of Consumer Advocate.
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gas utility, on behalf of the Connecticut Office of Consumers' Counsel.

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109. *Little Washington Wastewater Company, Inc., Masthope Wastewater Division*, Pennsylvania Public Utility Commission Docket No. R-2010-2207833. 2011. Concerning rate design and various revenue requirements issues, on behalf of the Masthope Property Owners Council.
110. *In the matter of Pittsfield Aqueduct Company, Inc.*, New Hampshire Public Utilities Commission Case No. DW 10-090. 2011. Concerning rate design and cost of service on behalf of the New Hampshire Office of the Consumer Advocate.
111. *In the matters of Pennichuck Water Works, Inc. Permanent Rate Case and Petition for Approval of Special Contract with Anheuser-Busch, Inc.*, New Hampshire Public Utilities Commission Case Nos. DW 10-091 and DW 11-014. 2011. Concerning rate design, cost of service, and contract interpretation on behalf of the New Hampshire Office of the Consumer Advocate.
112. *Artesian Water Co., Inc. v. Chester Water Authority*, U.S. District Court for the Eastern District of Pennsylvania Case No. 10-CV-07453-JP. 2011. Concerning cost of service, ratemaking methods, and contract interpretation on behalf of Chester Water Authority.
113. *North Shore Gas Company and The Peoples Gas Light and Coke Company Proposed General Increases in Rates for Gas Service*, Illinois Commerce Commission, Docket Nos. 11-0280 and 11-0281. 2011. Concerning rate design and cost of service on behalf of the Illinois Office of Attorney General, the Citizens Utility Board, and the City of Chicago.
114. *Ameren Illinois Company: Proposed general increase in electric delivery service rates and gas delivery service rates*, Illinois Commerce Commission, Docket Nos. 11-0279 and 11-0282. 2011. Concerning rate design and cost of service for natural gas and electric distribution service, on behalf of the Illinois Office of Attorney General and the Citizens Utility Board.
115. *Pa. Public Utility Commission v. Pennsylvania-American Water Co.*, Pennsylvania Public Utility Commission, Docket No. R-2011-2232243. 2011. Concerning rate design, cost of service, sales forecast, and automatic rate adjustments on behalf of the Pennsylvania Office of Consumer Advocate.
116. *Aqua Illinois, Inc. Proposed General Increase in Water and Sewer Rates*, Illinois Commerce Commission, Docket No. 11-0436. 2011. Concerning rate design and cost of service on behalf of the Illinois Office of Attorney General.
117. *City of Nashua Acquisition of Pennichuck Corporation*, New Hampshire Public Utilities Commission, Docket No. DW 11-026. 2011. Concerning the proposed acquisition of an investor-owned utility holding company by a municipality, including appropriate ratemaking methodologies, on behalf of the New Hampshire Office of Consumer Advocate.
118. *An Application by Heritage Gas Limited for the Approval of a Schedule of Rates, Tolls and Charges*, Nova Scotia Utility and Review Board, Case NSUARB-NG-HG-R-11. 2011. Concerning rate design and

cost of service, on behalf of the Nova Scotia Consumer Advocate.

119. *An Application of Halifax Regional Water Commission for Approval of a Cost of Service and Rate Design Methodology*, Nova Scotia Utility and Review Board, Case NSUARB-W-HRWC-R-11. 2011. Concerning rate design and cost of service, on behalf of the Nova Scotia Consumer Advocate.
120. *National Grid USA and Liberty Energy Utilities Corp.*, New Hampshire Public Utilities Commission, Docket No. DG 11-040. 2011. Concerning the costs and benefits of a proposed merger and related conditions, on behalf of the New Hampshire Office of Consumer Advocate.
121. *Great Northern Utilities, Inc., et al.*, Illinois Commerce Commission, Docket Nos. 11-0059, et al. 2012. Concerning options for mitigating rate impacts and consolidating small water and wastewater utilities for ratemaking purposes, on behalf of the Illinois Office of Attorney General.
122. *Pa. Public Utility Commission v. Aqua Pennsylvania, Inc.*, Pennsylvania Public Utility Commission, Docket No. R-2011-2267958. 2012. Concerning rate design, cost of service, and automatic rate adjustment mechanisms, on behalf of the Pennsylvania Office of Consumer Advocate.
123. *Golden State Water Company*, California Public Utilities Commission, Application 11-07-017. 2012. Concerning rate design and quality of service, on behalf of The Utility Reform Network.
124. *Golden Heart Utilities, Inc. and College Utilities Corporation*, Regulatory Commission of Alaska, Case Nos. U-11-77 and U-11-78. 2012. Concerning rate design and cost of service, on behalf of the Alaska Office of the Attorney General.
125. *Illinois-American Water Company*, Illinois Commerce Commission, Docket No. 11-0767. 2012. Concerning rate design, cost of service, and automatic rate adjustment mechanisms, on behalf of the Illinois Office of Attorney General.
126. *Application of Tidewater Utilities, Inc., for a General Rate Increase in Water Base Rates and Tariff Revisions*, Delaware Public Service Commission, Docket No. 11-397. 2012. Concerning rate design and cost of service study, on behalf of the Staff of the Delaware Public Service Commission.
127. *In the Matter of the Philadelphia Water Department's Proposed Increase in Rates for Water and Wastewater Utility Services*, Philadelphia Water Commissioner, FY 2013-2016. 2012. Concerning rate design and related issues for storm water service, on behalf of Citizens for Pennsylvania's Future.
128. *Corix Utilities (Illinois) LLC, Hydro Star LLC, and Utilities Inc. Joint Application for Approval of a Proposed Reorganization*, Illinois Commerce Commission, Docket No. 12-0279. 2012. Concerning merger-related synergy savings and appropriate ratemaking treatment of the same, on behalf of the Illinois Office of Attorney General.
129. *North Shore Gas Company and The Peoples Gas Light and Coke Company*, Illinois Commerce Commission, Docket Nos. 12-0511 and 12-0512. 2012. Concerning rate design, cost of service study, and automatic rate adjustment tariff on behalf of the Illinois Office of Attorney General.
130. *Pa. Public Utility Commission v. City of Lancaster Sewer Fund*, Pennsylvania Public Utility Commission, Docket No. R-2012-2310366. 2012. Concerning rate design, cost of service, and cost



allocation, on behalf of the Pennsylvania Office of Consumer Advocate.

131. *Aquarion Water Company of New Hampshire*, New Hampshire Public Utilities Commission, Docket No. DW 12-085. 2013. Concerning tariff issues, including an automatic adjustment clause for infrastructure improvement, on behalf of the New Hampshire Office of Consumer Advocate.
132. *In the Matter of the Application of Duke Energy Ohio, Inc., for an Increase in Electric Distribution Rates*, Public Utilities Commission of Ohio, Case No. 12-1682-EL-AIR, et al. 2013. Concerning rate design and tariff issues, on behalf of the Office of the Ohio Consumers' Counsel.
133. *In the Matter of the Application of Duke Energy Ohio, Inc., for an Increase in Natural Gas Distribution Rates*, Public Utilities Commission of Ohio, Case No. 12-1685-GA-AIR, et al. 2013. Concerning cost-of-service study, rate design, and tariff issues, on behalf of the Office of the Ohio Consumers' Counsel.
134. *In the Matter of the Application of The Dayton Power and Light Company to Establish a Standard Service Offer in the Form of an Electric Security Plan*, Public Utilities Commission of Ohio, Case No. 12-426-EL-SSO, et al. 2013. Concerning rate design, on behalf of the Office of the Ohio Consumers' Counsel.
135. *Application of the Halifax Regional Water Commission, for Approval of Amendments to its Schedule of Rates and Charges and Schedule of Rules and Regulations for the delivery of water, public and private fire protection, wastewater and stormwater services*, Nova Scotia Utility and Review Board, Matter No. M05463, 2013. Concerning rate design, cost-of-service study, and miscellaneous tariff provisions, on behalf of the Consumer Advocate of Nova Scotia.
136. *California Water Service Co. General Rate Case Application*, California Public Utilities Commission, Docket No. A.12-07-007. 2013. Concerning rate design, phase-in plans, low-income programs, and other tariff issues, on behalf of The Utility Reform Network.
137. *Application of The United Illuminating Company to Amend its Rate Schedules*, Connecticut Public Utility Regulatory Authority, Docket No. 13-01-19. 2013. Concerning sales forecast, rate design, and other tariff issues, on behalf of the Connecticut Office of Consumer Counsel.
138. *Application of Aquarion Water Company of Connecticut to Amend its Rate Schedules*, Connecticut Public Utility Regulatory Authority, Docket No. 13-02-20. 2013. Concerning sales forecast and rate design on behalf of the Connecticut Office of Consumer Counsel.
139. *Ameren Illinois Company, Proposed General Increase in Natural Gas Delivery Service Rates*, Illinois Commerce Commission, Docket No. 13-0192. 2013. Concerning rate design and revenue allocation, on behalf of the Illinois Office of Attorney General and Citizens Utility Board.
140. *Commonwealth Edison Company, Tariff filing to present the Illinois Commerce Commission with an opportunity to consider revenue neutral tariff changes related to rate design*, Docket No. 13-0387. 2013. Concerning rate design and cost of service study issues, on behalf of the Illinois Office of Attorney General.
141. *In the Matter of the Potomac Electric Power Company for Authority to Increase Existing Retail Rates and Charges for Electric Distribution Service*, District of Columbia Public Service Commission, Formal Case No. 1103. 2013. Concerning rate design, revenue allocation, and cost-of-service study issues, on

behalf of the District of Columbia Office of Peoples' Counsel.

142. *Pa. Public Utility Commission v. Pennsylvania-American Water Co.*, Pennsylvania Public Utility Commission, Docket No. R-2013-2355276. 2013. Concerning rate design, revenue allocation, and regulatory policy, on behalf of the Pennsylvania Office of Consumer Advocate.
143. *In the Matter of the Revenue Requirement and Transmission Tariff Designated as TA364-8 filed by Chugach Electric Association, Inc.*, Regulatory Commission of Alaska, U-13-007. 2013. Concerning rate design and cost-of-service study issues, on behalf of the Alaska Office of the Attorney General.
144. *Ameren Illinois Company: Tariff filing to present the Illinois Commerce Commission with an opportunity to consider revenue neutral tariff changes related to rate design*, Docket No. 13-0476. 2013. Concerning rate design and cost of service study issues, on behalf of the Illinois Office of Attorney General.
145. *Pa. Public Utility Commission v. City of Bethlehem Bureau of Water*, Pennsylvania Public Utility Commission, Docket No. R-2013-2390244. 2014. Concerning rate design, cost of service study, and revenue allocation on behalf of the Pennsylvania Office of Consumer Advocate.
146. *In the Matter of the Tariff Revision Designated as TA332-121 filed by the Municipality of Anchorage d/b/a Municipal Light and Power Department*, Regulatory Commission of Alaska, U-13-184. 2014. Concerning rate design and cost-of-service study issues, on behalf of the Alaska Office of the Attorney General.
147. *Pa. Public Utility Commission v. Pike County Light and Power Co. - Gas*, Pennsylvania Public Utility Commission, Docket No. R-2013-2397353. 2014. Concerning rate design and revenue allocation on behalf of the Pennsylvania Office of Consumer Advocate.
148. *Pa. Public Utility Commission v. Pike County Light and Power Co. - Electric*, Pennsylvania Public Utility Commission, Docket No. R-2013-2397237. 2014. Concerning rate design, cost of service study, and revenue allocation on behalf of the Pennsylvania Office of Consumer Advocate.
149. *The Peoples Gas Light and Coke Company North Shore Gas Company Proposed General Increase In Rates for Gas Service*, Illinois Commerce Commission, Docket Nos. 14-0224 and 14-0225. 2014. Concerning rate design on behalf of the Illinois Office of the Attorney General and the Environmental Law and Policy Center.
150. *Apple Valley Ranchos Water Company*, California Public Utilities Commission, Docket No. A.14-01-002. 2014. Concerning rate design and automatic rate adjustment mechanisms on behalf of the Town of Apple Valley.
151. *Application by Heritage Gas Limited for Approval to Amend its Franchise Area*, Nova Scotia Utility and Review Board, Matter No. M06271. 2014. Concerning criteria, terms, and conditions for expanding a utility's service area and using transported compressed natural gas to serve small retail customers, on behalf of the Nova Scotia Consumer Advocate.
152. *Notice of Intent of Entergy Mississippi, Inc. to Modernize Rates to Support Economic Development, Power Procurement, and Continued Investment*, Mississippi Public Service Commission Docket No. 2014-UN-132. 2014. Concerning rate design and tariff issues, on behalf of the Mississippi Public

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153. *Pa. Public Utility Commission v. City of Lancaster Bureau of Water*, Pennsylvania Public Utility Commission, Docket No. R-2014-2418872. 2014. Concerning rate design, cost of service study, and revenue allocation on behalf of the Pennsylvania Office of Consumer Advocate.
154. *Pa. Public Utility Commission v. Borough of Hanover Municipal Water Works*, Pennsylvania Public Utility Commission, Docket No. R-2014-2428304. 2014. Concerning rate design, cost of service study, and revenue allocation on behalf of the Pennsylvania Office of Consumer Advocate.
155. *Investigation of Commonwealth Edison Company's Cost of Service for Low-Use Customers In Each Residential Class*, Illinois Commerce Commission, Docket No. 14-0384. 2014. Concerning rate design on behalf of the Illinois Office of Attorney General.
156. *Application of the Halifax Regional Water Commission, for Approval of its Schedule of Rates and Charges and Schedule of Rules and Regulations for the Provision of Water, Public and Private Fire Protection, Wastewater and Stormwater Services*, Nova Scotia Utility and Review Board, Matter No. M06540. 2015. Concerning rate design, cost of service study, and tariff issues on behalf of the Nova Scotia Consumer Advocate.
157. *Testimony concerning organization and regulation of Philadelphia Gas Works*, Philadelphia City Council's Special Committee on Energy Opportunities. 2015.
158. *Testimony concerning proposed telecommunications legislation*, Maine Joint Standing Committee on Energy, Utilities, and Technology. 2015.
159. *Pa. Public Utility Commission v. United Water Pennsylvania, Inc.*, Pennsylvania Public Utility Commission, Docket No. R-2015-2462723. 2015. Concerning rate design, cost of service study, and revenue allocation on behalf of the Pennsylvania Office of Consumer Advocate.
160. *Ameren Illinois Company Proposed General Increase in Gas Delivery Service Rates*, Illinois Commerce Commission, Docket No. 15-0142. 2015. Concerning rate design on behalf of the Illinois Office of Attorney General.
161. *Maine Natural Gas Company Request for Multi-Year Rate Plan*, Maine Public Utilities Commission, Docket No. 2015-00005. 2015. Concerning rate design and automatic rate adjustment tariffs on behalf of the Maine Office of the Public Advocate.
162. *Application of Ohio Edison Company, The Cleveland Electric Illuminating Company and The Toledo Edison Company for Authority to Provide for a Standard Service Offer*, Public Utilities Commission of Ohio, Case No. 14-1297-EL-SSO. 2015. Concerning rate design and proposed rate discounts on behalf of the Office of the Ohio Consumers' Counsel.
163. *An Application of the Halifax Regional Water Commission, for approval of revisions to its Cost of Service Manual and Rate Design for Stormwater Service*, Nova Scotia Utility and Review Board, Matter No. M07147. 2016. Concerning stormwater rate design and cost of service, on behalf of the Nova Scotia Consumer Advocate.

164. *In The Matter Of An Application By Heritage Gas Limited For Enhancement To Its Existing Residential Retro-Fit Assistance Fund*, Nova Scotia Utility and Review Board, Matter No. M07146. 2016. Concerning costs and benefits associated with utility system expansion, on behalf of the Nova Scotia Consumer Advocate.
165. *In the Matter of the Application of UNS Electric, Inc. for the Establishment of Just and Reasonable Rates and Charges*, Arizona Corporation Commission, Docket No. E-04204A-15-0142. 2016. Concerning rate design and residential demand charges on behalf of Arizona Utility Ratepayer Alliance.
166. *In the Matter of Application of Water Service Corporation of Kentucky for a General Adjustment in Existing Rates*, Kentucky Public Service Commission, Case No. 2015-00382. 2016. Concerning rate design and service area consolidation on behalf of the Kentucky Office of the Attorney General.
167. *Massachusetts Electric Company And Nantucket Electric Company*, Massachusetts Department of Public Utilities, Docket No. DPU 15-155. 2016. Concerning rate design and cost-of-service studies on behalf of the Massachusetts Office of Attorney General.
168. *In the Matter of Abenaki Water Company*, New Hampshire Public Utilities Commission, Docket No. DW 15-199. 2016. Concerning rate design on behalf of the New Hampshire Office of the Consumer Advocate.
169. *In the Matter of an Application by Heritage Gas Limited for Approval of its Customer Retention Program*, Nova Scotia Utility and Review Board Matter No. M07346. 2016. Concerning a regulatory response to competition and potential business failure on behalf of the Nova Scotia Consumer Advocate.
170. *Joint Application of Pennsylvania-American Water Company and the Sewer Authority of the City of Scranton*, Pennsylvania Public Utility Commission Docket No. A-2016-2537209. 2016. Concerning the lawfulness, costs and benefits, and ratemaking treatment of a proposed acquisition of a combined wastewater and storm water utility on behalf of the Pennsylvania Office of Consumer Advocate.
171. *Application of The United Illuminating Company to Amend its Rate Schedules*, Connecticut Public Utility Regulatory Authority Docket No. 16-06-04. 2016. Concerning rate design, cost-of-service study, and other tariff issues on behalf of the Connecticut Office of Consumer Counsel.
172. *Ameren Illinois Company Tariff filing to present the Illinois Commerce Commission with an opportunity to consider revenue neutral tariff changes related to rate design*, Illinois Commerce Commission Docket No. 16-0387. 2016. Concerning rate design and cost-of-service study on behalf of the Illinois Office of the Attorney General.
173. *Unitil Energy Systems, Inc.*, New Hampshire Public Utilities Commission Docket No. 16-384. 2016. Concerning rate design and cost-of-service study on behalf of the New Hampshire Office of Consumer Advocate.
174. *Liberty Utilities (Granite State Electric) Corp.*, New Hampshire Public Utilities Commission Docket No. 16-383. 2016. Concerning rate design and cost-of-service study on behalf of the New Hampshire Office of Consumer Advocate.



# Moving Toward Demand-Based Residential Rates

*The widespread use of automated metering infrastructure in the electricity distribution industry is generating increasing discussion of residential demand charges. An analysis of six types of residential rate designs shows that designing residential rates with seasonal consumption charges might make significant progress toward a more efficient rate design. Seasonal usage rates are understandable to customers, avoid many of the problems with demand-based rates, do not require significant implementation expenditures, and may avoid the extreme bill impacts of some demand-based rate options.*

Scott J. Rubin

**Scott J. Rubin** is a consultant, researcher, and attorney who has worked exclusively on issues affecting the public utility industries for more than 30 years. His consulting clients include public advocates, consumer groups, government-owned utilities, research foundations, and the staffs of utility regulatory commissions. He has testified as an expert witness on rate design, cost-of-service studies, and various policy matters in more than 150 cases throughout the U.S. and Canada; testified as an expert before federal, state, and local legislative committees; and appeared as lead counsel before regulatory commissions in more than a dozen jurisdictions. Mr. Rubin received his bachelor's degree with distinction in Political Science from Pennsylvania State University and his law degree with honors from George Washington University.

## I. Background

The widespread use of automated metering infrastructure (AMI) in the electricity distribution industry is generating increasing discussion of residential demand charges. Conferences are being held where pro-demand-charge consultants (Ryan Hledik, 2015) square off

against anti-demand-charge consultants (Barbara Alexander, 2015); interest groups are posting blogs about the desirability of residential demand charges (Rocky Mt. Institute, 2015); and articles are being published in this *Journal* to try to elucidate points on both sides of the issue (Blank and Gegax, 2014; Hledik, 2014).



Both sides make valid points. On the one hand, every electricity distribution cost-of-service study (COSS) recognizes that a substantial portion of distribution costs are demand-related. Most utilities, however, have residential rates that contain a customer charge and one or more rates based on energy consumption (rates per kilowatt-hour). Residential demand charges are rare. Where they exist, they are nearly always optional. This means that most residential customers continue to pay demand-related costs through a combination of a flat-rate customer charge and per-kWh charges, rates that may not precisely mirror a customer's demand.

On the other side are those who suggest that residential demand charges are fraught with problems, not the least of which are the need for substantial consumer education and difficulties with tariff administration (including reprogramming utility billing systems and training customer service personnel). Those on the "anti" side of the debate also note that there are important rate design concerns other than strict adherence to the results of a COSS. These include understandability, efficiency, gradualism, revenue stability, and affordability.

With AMI the industry has an unprecedented opportunity to better understand the relationship between peak demand and

energy consumption on a very granular level – that is, that of the individual customer. The challenge will be to use this information to move toward a residential rate design that is more efficient (that is, improves the collection of demand-related costs from residential customers who cause the demand), yet remains understandable, affordable, and easy to administer.

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*Any potential  
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## II. Advantages and Disadvantages of Different Rate Designs

Before discussing any specific analyses, it is worth remembering that there is no "perfect" rate design. The rate design process involves developing averages and groupings for thousands, or even millions, of customers. No rate design will exactly capture the actual cost to serve an individual residential customer, but the goal is to have a rate design that treats all customers fairly within the confines of the averaging and grouping process.

Thus, any potential rate design must represent a compromise involving a series of trade-offs. Prof. Bonbright taught that among the factors to be evaluated in a rate design are fairness (including relationship of the rates to cost), encouraging the wise use of the service, understandability, ease of administration, non-discrimination, revenue stability, and gradualism (Bonbright, 1961).

Billing based on annual demand has a certain theoretical appeal, but the annual demand is not known until the end of the peak season. A summer-peaking utility might experience its peak in July or August, or even in September during an unusual weather event. Similarly, a winter-peaking utility could reach its peak in December, January, or February. Moreover, a utility whose peak fluctuates (winter peaking some years, summer peaking in others) might not know its annual peak until an entire year passes. In any event, billing based on the annual peak always will be based on some event in the past, often many months before, that the customer can no longer control. When a customer moves during the year or a new home is added to the service territory, there also could be a serious question about the fairness of the billing determinant that will be used for the new account.

Further, the customer's ability to control its peak-period usage might be limited, or simply the

result of luck (good or bad). For instance, if a customer happens to be on vacation during the peak day, her contribution to the annual peak might be unusually low compared to her normal seasonal consumption. Similarly, if a customer happens to have the bad luck of having visitors on the peak day, her contribution to the peak might be unusually high compared to her normal seasonal usage.

Other events also could hamper a customer's ability to control consumption during the precise peak hour, especially because the time of the peak is not knowable when energy is being consumed. These might include appliance cycling during the day (how the refrigerator was cycling during the peak hour), whether the customer has a medical device (such as an oxygen concentrator) that was required to work during the peak hour, whether the peak hour occurred during the work day or after the customer returned home from work, and so on.

Rates based on billing (that is, monthly) demand would eliminate some of the temporal shift involved when annual demand is used, but there is a question about the relationship between a customer's monthly peak demands and his contribution to the annual system peak. This is particularly the case for customers who peak off-season, such as space-heating customers in a summer-peaking utility.

Similarly, billing based on annual energy consumption has some advantages (it is easy to understand and administer, and it spreads the utility's revenues throughout the year), but it may not be fair to consumers who use electricity efficiently (that is, high-load-factor customers who control their peak usage). Such a rate also can send the incorrect price signal that the cost of electricity distribution is the same

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*From a utility's perspective, having most distribution costs collected in the peak season could create concerns with revenue stability.*

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throughout the year, regardless of the time of day or season of consumption.

Collecting demand costs partially through customer charges also can be problematic. Implicitly, this type of rate design assumes that all customers contribute equally to peak demand, which is rarely the case. It also assumes that there are no differences in distribution facilities based on a customer's peak demand. This ignores the fact that transformers and other facilities might be sized differently depending on the expected demands from

connected customers. For example, why should a customer in an apartment without air conditioning pay the same amount for demand-related costs as a customer in a large, air-conditioned home where the thermostat is set to 70 °F? Per-customer billing of demand-related costs also fails to send any price signal to a customer about the longer-term costs the customer's energy usage patterns cause to the system.

Seasonal billing also can create problems, both for the utility and for customers. For example, high summer charges essentially give space-heating customers a "free ride" on the distribution network. While heating customers may not "cause" the system peak, heating customers certainly use wires, poles, transformers, and other distribution facilities that were sized to meet summer peak demands. Setting a non-summer distribution charge very low, therefore, could be unfair to customers.

Finally, from a utility's perspective, having most distribution costs collected in the peak season could create concerns with revenue stability, particularly if weather happens to be unusual (a summer that is much cooler than normal, for example). Such seasonal pricing certainly would change the cash flows of electric distribution utilities, making the cash-flow patterns similar to those experienced by natural gas distribution utilities (very high



peak-season revenues) that may require a utility to have a significant line of credit to provide adequate off-season cash flows.

### III. Previous Research

In 2014, Blank and Gegax (Blank and Gegax, 2014), working with a small data set (43 households), used linear regression analysis to show that annual energy consumption (kWh) was positively but somewhat weakly correlated with a customer's contribution to peak demand (expressed in kilowatts). Their regression analysis showed that while the result was statistically significant ( $p < 0.001$ ) annual kWh explained only 38 percent of the variability in peak demand (kW).

That study also posited that a regression through the origin (that is, an intercept equal to zero) might do a better job of explaining the relationship between kWh and kW. Given the different measurements involved in linear regression analyses with and without an intercept term, Eisenhauer explains that the  $R$ -squared cannot be used to compare results; rather, results using the two approaches must be evaluated by comparing the standard errors of the analyses (the lower the standard error, the closer the correlation between the variables) (Eisenhauer, 2003). On this basis, the analyses of Blank and Gegax show that the

regression with an intercept term is superior (a standard error of 1.96 compared to the regression without an intercept's standard error of 3.06).

Blank and Gegax also suggested that a rate that divided demand charge recovery between the customer charge and the kWh charge might enhance fairness. They did not develop any analyses, however, that would evaluate this hypothesis.

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*Blank and Gegax suggested that a rate that divided demand charge recovery between the customer charge and the kWh charge might enhance fairness.*

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### IV. Methods

This article expands on the Blank and Gegax approach to evaluate the ability of different residential rate designs. Rate designs are compared for their ability to collect demand-related costs in a manner that might be fairer to customers and consistent with other important rate design principles and goals.

In particular, linear regression analysis is used on a data set containing monthly energy consumption and annual contribution to the system peak demand for 77,675 residential

accounts. The data set contains data for a portion of the service area of an electric distribution utility in U.S. Department of Energy climate zone 5 (U.S. Department of Energy, 2013). Some customers in the data set use electricity for space heating in the winter, but most do not. Many (but not all) non-heating customers have summer peak usage evidencing energy usage for air conditioning or other seasonal space cooling. Prior to developing the final data set, some outliers were eliminated (such as accounts with highly atypical usage or demand profiles, those with missing data, etc.).

Hledik (2014) notes that some residential demand charges are developed using billing demand (that is, each customer's maximum demand in each billing period), rather than contribution to annual peak demand. In order to evaluate a rate design using billing demand, it is necessary to have the monthly peak demand for each customer. The data set does not contain those monthly demands, so monthly demands were estimated for each customer using the base, low, and high usage load profiles developed by the U.S. Department of Energy (DOE) for a city within the utility's service area.

Specifically, the "low" load profile was used for accounts with annual usage less than 7,500 kWh; the "base" profile was used for accounts using between 7,500 and 12,500 kWh during the year; and

the "high" profile was used for accounts using more than 12,500 kWh in the year. From each load profile, the peak demand was determined for each month. From that monthly peak demand, a monthly load factor (ratio of average demand to peak demand) was calculated for each month. The July load factor from the applicable load profile was then compared to the actual July load factor (July was the month when the peak occurred in the data set) for each customer to calibrate the results. For example, if a customer had a load factor in July of 0.50 but the applicable DOE load profile had a July load factor of 0.45, the actual load factor for the month was 11 percent higher than the profile. It was assumed, therefore, that the load factor would be 11 percent higher than the applicable DOE profile in all other months. The monthly load factor was then used to calculate the monthly billing demand. The following equation shows the calculation of May billing demand for a customer in the "base" group

(using between 7,500 and 12,500 kWh in the year).

designed to collect the same amount of revenues.

$$kW_{May} = \frac{kWh_{May}/744}{BLF_{May} \times [(kWh_{Jul}/744)/(kW_{Annual}/BLF_{Jul})]}$$

where kW = Peak kW demand in a period (month or Annual); kWh = kWh consumption in a period; BLF = Load factor calculated from DOE Base profile in a period; 744 = Number of hours in a 31-day month.

Illustrative rates were then calculated for six different rate design options, as described in Table 1. The rates are based on the customer cost (\$13.25 per month per customer) and demand charge (\$4.93 per kW per month based on annual peak demand) used by Blank and Gegax. Applying those rates to the customers in the data set produces revenues of approximately \$27.7 million. All other rate design options were

For purposes of these analyses, it is assumed that the existing rate design is the All kWh design. Thus, the existing rate has a customer charge that collects customer-related costs of \$13.25 per month. All other costs (to simplify, it is assumed that all other distribution costs are demand-related) are collected through a flat charge of 1.52¢ per kWh throughout the year.

The second assumption is that the Annual Demand rate represents the cost to serve each customer. That is, this rate collects all customer-related costs in an equal amount per customer and all demand-related costs based solely on each customer's contribution to the annual peak demand. This also makes the

**Table 1: Rate Design Options.**

Option	Description	Customer Charge (per month)	Demand Charge (per kW per month)	Summer Energy (per kWh)	Non-Summer Energy (per kWh)
Annual Demand	Per kW charge based on annual peak	\$13.25	\$4.93	- 0 -	- 0 -
Billing Demand	Per kW charge based on monthly peak	\$13.25	\$5.55	- 0 -	- 0 -
All kWh	All demand costs per kWh	\$13.25	- 0 -	1.52¢	1.52¢
Split	Demand costs 60% per kWh; 40% in customer charge	\$19.84	- 0 -	0.91¢	0.91¢
All Summer	All demand costs per summer (Jun-Sep) kWh	\$13.25	- 0 -	4.79¢	- 0 -
Seasonal	Summer kWh charge is 2 times non-summer charge	\$13.25	- 0 -	2.31¢	1.15¢

simplifying assumption that all demand-related costs are allocated to customer classes based solely on a single coincident peak (that is, each class's contribution to the single hour of the year with the highest system demand).

Thus, the assumed cost to serve each customer (the Annual Demand rate) can be compared to the charges under other rate designs to assess the relationship between the cost of service and revenues for each customer. Rather than comparing demand (measured in kW) against charges (measured in dollars per year), the analyses compare the customer-specific cost of service (in dollars per year) against charges under other rate design options (also in dollars per year for each customer). Because of the existence of a fixed customer charge, bills will never approach zero, which avoids one of the analytical issues raised by Blank and Gegax in their analyses that compared demand (kW) to energy (kWh).

## V. Results

Initially, the characteristics of the cost of service are examined. The data show that the cost to serve customers varies from a low of \$159.35 per year (a customer with almost no contribution to peak demand) to \$750.48 per year (the highest-demand customer), with an average of \$356.79 per year (standard deviation of 103.78).

Next, the existing rate (All kWh) is compared to the cost of service. While the cost of service indicated a maximum cost of \$750.48, the existing rates result in a maximum annual bill that is substantially higher: \$919.00. While the average annual bill is essentially the same as the cost of service (\$356.75 versus \$356.79), the existing rates' standard deviation is higher (127.77 versus 103.78), providing an initial



indication that there is a meaningful difference between revenues and costs for many customers.

A linear regression analysis provides further evidence that the existing rate does not ideally track the cost of service for many customers. The analysis shows that the existing rate is positively but modestly correlated with the cost of service, and the relationship is statistically significant ( $p < 0.001$ ). Specifically, both the intercept (169.200) and slope (0.526) are positive, indicating that the relationship is logical (customers

with higher costs pay higher rates). The *R*-squared, however, is 0.419, which indicates that there is a substantial unexplained variance between the cost of service and customers' annual bills.

The next stage in the analysis is to evaluate each rate design option in two ways. First, the option is compared to the cost of service with a linear regression analysis. Second, the magnitude of rate change (compared to the existing All kWh rate) is described to indicate whether this type of rate design change might create unacceptable customer impacts. The results of these analyses are shown in Tables 2 and 3.

Several points are noteworthy in these results. First, to move immediately to rates based on annual demand (even if other obstacles could be overcome) would result in dramatic rate changes, ranging from a 76 percent decrease to a 162 percent increase. Ten percent of customers would experience annual bill decreases of 29 percent or less, while another 10 percent of customers would face annual bill increases of 32 percent or more, as shown in Fig. 1. It is unlikely that a revenue-neutral rate design change having changes of this magnitude would be consistent with the rate design criteria of public acceptability and gradualism. The difference from existing (kWh-based) rates is simply too severe.

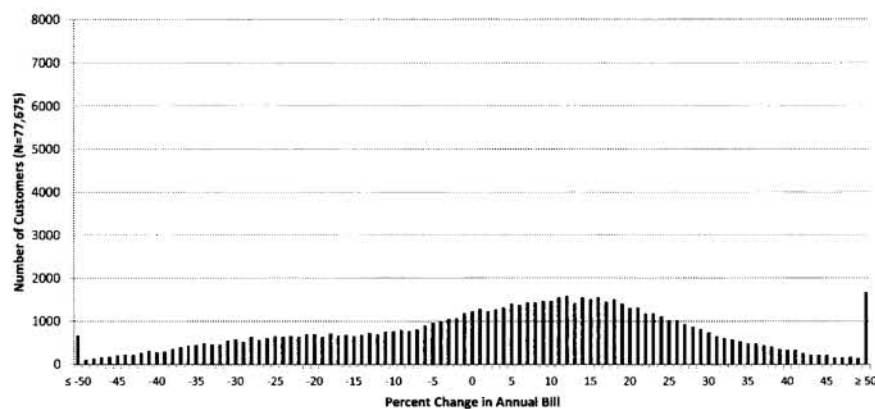
Interestingly, adopting a rate design based on billing demand

**Table 2:** Results of Linear Regression Analyses Compared to Cost (All Demand).

Option	Intercept	Slope	R-squared	Significance
All kWh	169.200	0.526	0.419	$\rho < 0.001$
Billing Demand	178.876	0.499	0.426	$\rho < 0.001$
Split	43.695	0.878	0.419	$\rho < 0.001$
All Summer	60.580	0.830	0.846	$\rho < 0.001$
Seasonal	125.856	0.648	0.550	$\rho < 0.001$

**Table 3:** Bill Changes from Rate Design Options Compared to Existing Bills (All kWh).

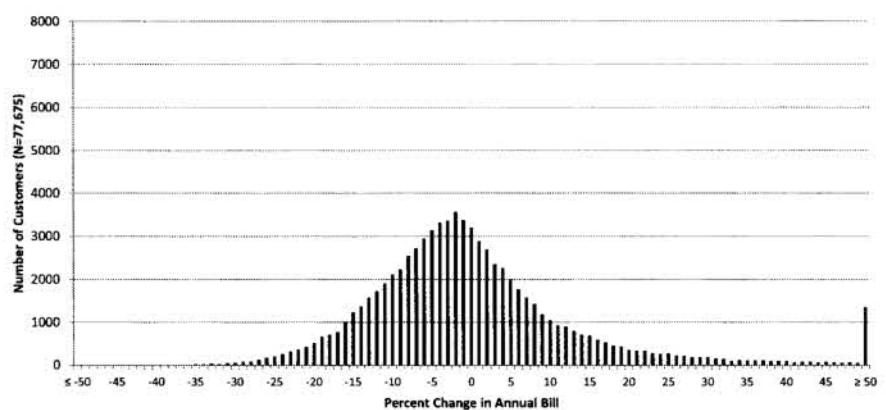
Option	Average % Change	Min/Max % Change	10th/90th Percentile	% Bills Increased
Annual Demand	4.4%	-76%/+162%	-29%/+32%	62%
Billing Demand	0.6%	-40%/+183%	-14%/+16%	43%
Split	4.6%	-25%/+49%	-14%/+24%	60%
All Summer	3.0%	-76%/+74%	-26%/+26%	63%
Seasonal	0.7%	-19%/+18%	-6%/+6%	61%

**Fig. 1:** Distribution of Rate Increases Required to Move from All kWh Rates to Rates Based on Annual Demand

(that is, the customer's peak demand in each billing month) would make almost no progress toward aligning rates with the cost of service. Specifically, this option (Billing Demand) has an *R*-squared of just 0.426 (compared to existing rates' *R*-squared of 0.419) when compared to the cost of service. While this option would have a less severe rate impact than moving to the Annual Demand option, there are still sizeable rate

dislocations, with some customers experiencing increases even higher than those experienced under the Annual Demand option (as high as 183 percent). Most customers, however, would experience increases in the range of  $\pm 15\%$  (Fig. 2), which is somewhat more acceptable than the  $\pm 30\%$  range under the Annual Demand option. Further, this is the only rate design option evaluated that has more customers receiving annual bill decreases than increases (43 percent receive increases, compared to the other options where more than 60 percent of customers receive increases).

It also is interesting to note that the Split option that collects 60 percent of demand-related costs through a kWh charge and 40 percent through the customer charge, does nothing to better align costs and revenues. The *R*-squared under this option is identical to the *R*-squared of existing rates at 0.419. In this

**Fig. 2:** Distribution of Rate Increases Required to Move from All kWh Rates to Rates Based on Billing Demand

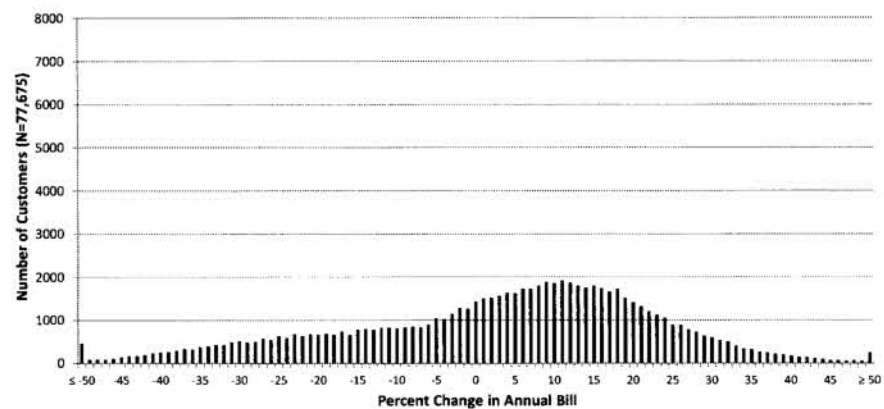


example, this option represents a classic case of a rate design that creates winners and losers but does nothing to improve the overall efficiency of the rate design (that is, the rate design's ability to more closely track the cost of service).

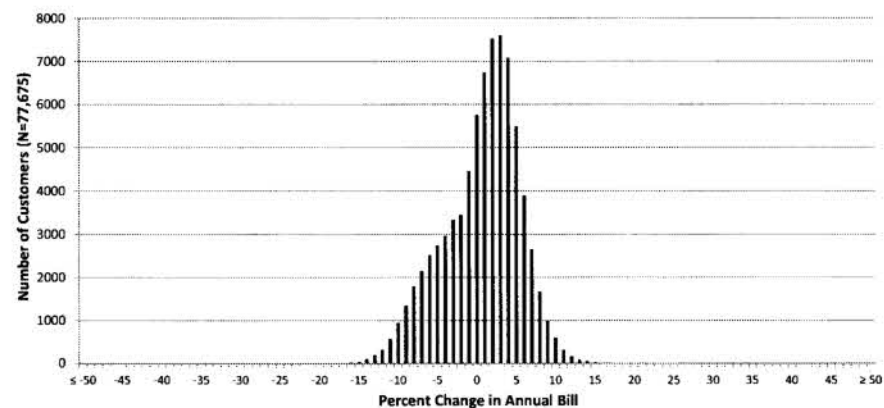
The last two options evaluated represent cases that may achieve some of the benefits of demand-based rates without using a kW billing determinant. The rate design that collects all demand-related costs through peak-season (summer) kWh charges comes much closer to tracking the cost of service, with an *R*-squared of 0.846. This type of rate could avoid the educational and implementation problems of a demand-based rate while better aligning rates with costs. This type of rate design, however, does have theoretical problems, as discussed above (particularly the problems of revenue stability and off-season customers getting the free use of the distribution network).

Moving to this type of rate design also would create significant annual bill changes for customers. Most customers would experience increases in the range of  $\pm 26\%$ , with the highest and lowest increases of approximately  $\pm 75\%$  (Fig. 3).

The final option evaluated has a summer kWh charge that is double the non-summer kWh charge. This might represent an incremental change in the rate design that does not involve the issues associated with



**Fig. 3:** Distribution of Rate Increases Required to Move from All kWh Rates to Rates Based on Summer kWh



**Fig. 4:** Distribution of Rate Increases Required to Move from All kWh Rates to Seasonal kWh Rates

demand-based billing, but moves closer toward cost-based rates in a gradual manner that considers customer impacts. This type of rate design makes meaningful movement toward tracking the cost of service (*R*-squared of 0.550 compared to the existing rate design's 0.419), but without the drastic changes in annual bills that the other rate design options would engender. Under this option, most customers would see bills change within the

range of  $\pm 6\%$ , with no customer experiencing a change outside the range of  $\pm 19\%$ , as shown in Fig. 4.

## VI. Conclusion

The illustrative rate design options evaluated in this article contain some important results. For example, shifting costs between consumption and customer charges may do nothing to improve the efficiency of the

rate design, even though customers experience dramatic changes in their annual bills. Similarly, while one might expect monthly billing demands to be closely correlated with annual peak demand, that is not the case in this data set. In fact, using monthly billing demands does very little to improve the efficiency of the rate design compared to a simple kWh-based rate design. Once again, while winners and losers are created, the overall rate design is no better at tracking the cost of serving customers than a consumption-based design.

From these examples, it appears that designing residential electric distribution rates with seasonal consumption charges (higher peak-season charges) might make significant progress toward a more efficient rate design. Seasonal kWh rates are understandable to customers, avoid many of the problems with demand-based rates (such as the “lucky” customer who happens to be away from home on the day of the annual peak), do not require significant implementation expenditures, and may avoid the extreme bill

impacts of some demand-based rate options.

There are a limitless number of rate design options available to utilities and regulators. With the wide-scale deployment of AMI, data will be available that will allow analysts to develop rate design options that improve the efficiency of the rate design (that is, its ability to have a customer’s revenues collect the cost of serving the customer) while also evaluating the impacts of the rate design change on customers. This article has highlighted some of the statistical and comparative techniques that should be helpful in the development of such rates. It is hoped that analysts and researchers will further explore these topics with more extensive data sets, other rate design options, and different statistical techniques for evaluating the ability to improve rate design efficiency while remaining sensitive to other longstanding rate design principles and goals. ■

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**Calculation of Unit Costs of Service for the Residential Class**

Line		Allocation basis	Cost of Service					
			Total	4 CP	NCP	Indiv. max	Energy	Customers
1	Production demand	Avg. & Excess (4CP)	\$ 663,070,964	\$ 425,360,023	\$ -	\$ -	\$ 237,710,940	\$ -
2	Production energy	Energy	468,828,894				468,828,894	
3	Transmission & ancillary	4 CP	157,012,443	157,012,443				
4	Distribution substation	NCP	52,743,613		52,743,613			
5	Distribution primary lines	NCP	218,599,790		218,599,790			
6	Distribution secondary	Individual max KW	173,409,381			173,409,381		
7	Customer accounts	# of customers	92,678,529					92,678,529
8	Metering	# of customers	81,516,159					81,516,159
9	Billing	# of customers	11,500,132					11,500,132
10	Meter reading	# of customers	3,389,741					3,389,741
11	Low-income discount	# of customers	(35,634,078)					(35,634,078)
12	System benefits	# of customers	39,092,212	-	-	-	-	39,092,212
13	Total residential		\$ 1,926,207,779	\$ 582,372,466	\$ 271,343,403	\$ 173,409,381	\$ 706,539,834	\$ 192,542,695
14	Units			3,472,165	4,304,302	7,258,543	13,518,424,000	1,059,292
15	Unitized Cost (annual)			\$ 167.73	\$ 63.04	\$ 23.89	\$ 0.0523	\$ 181.77

Sources / notes:

- I. 1 Average & excess split between demand and energy from Workbook A, Avg & Excess tab, cell D29 (35.85% is average demand, or energy)
- I. 14 Units from APS COSS Workbook A:
  - Energy: Energy (ACC) tab, cell D62
  - 4 CP: 4 CP (ACC) tab, cell D62
  - NCP: NCP (ACC) tab, cell D62
  - Individual max: Ind Max (ACC) tab, cell D62
  - Customers: Customer Count tab, cell C29

**Detail of Rate and Cost Calculations for Customer ID 561,958**

**Present Rate (ET-2)**

	Days	\$/Day	On-Peak kWh	\$/On-Peak kWh	Off-Peak kWh	\$/Off-Peak kWh	Bill
January	31	0.556	187.94	0.19847	1,152.08	0.06116	\$ 125.00
February	28	0.556	165.19	0.19847	804.31	0.06116	97.54
March	31	0.556	101.35	0.19847	1,218.31	0.06116	111.86
April	30	0.556	248.03	0.19847	1,630.25	0.06116	165.61
May	31	0.556	254.00	0.24477	1,176.06	0.06118	151.36
June	30	0.556	90.50	0.24477	434.07	0.06118	65.39
July	31	0.556	51.31	0.24477	308.84	0.06118	48.69
August	31	0.556	47.51	0.24477	320.91	0.06118	48.50
September	30	0.556	69.10	0.24477	329.04	0.06118	53.72
October	31	0.556	129.13	0.24477	648.74	0.06118	88.53
November	30	0.556	303.57	0.19847	1,796.42	0.06116	186.80
December	31	0.556	102.37	0.19847	839.24	0.06116	88.88
							\$ 1,231.89

**Proposed Rate (R-1)**

	Days	\$/Day	On-Peak kWh	\$/On-Peak kWh	Off-Peak kWh	\$/Off-Peak kWh	On-Peak kW	\$/On-Peak kW	Bill
January	31	0.789	105.16	0.12730	1,234.86	0.08070	19.94	6.60	\$ 269.10
February	28	0.789	145.61	0.12730	823.89	0.08070	19.98	6.60	238.98
March	31	0.789	104.72	0.12730	1,214.94	0.08070	13.73	6.60	226.45
April	30	0.789	260.97	0.12730	1,617.31	0.08070	20.53	6.60	322.91
May	31	0.789	265.23	0.15160	1,164.83	0.08070	16.93	6.60	270.41
June	30	0.789	66.23	0.15160	458.34	0.08070	5.57	6.60	107.46
July	31	0.789	42.65	0.15160	317.50	0.08070	5.46	6.60	92.58
August	31	0.789	39.71	0.15160	328.71	0.08070	5.20	6.60	91.33
September	30	0.789	60.06	0.15160	338.08	0.08070	5.42	6.60	95.83
October	31	0.789	104.49	0.15160	673.38	0.08070	16.55	6.60	203.87
November	30	0.789	256.86	0.12730	1,843.13	0.08070	18.31	6.60	325.95
December	31	0.789	61.00	0.12730	880.61	0.08070	11.65	6.60	180.18
									\$ 2,425.06

**Cost of Service**

	Units	Unit Cost	Total Cost
4 CP	0.30	\$ 167.73	\$ 50.32
NCP	0.31	\$ 63.04	19.54
Indiv. max	23.36	\$ 23.89	558.07
Energy	12,408.27	\$ 0.05226	648.46
Customers	1.00	\$ 181.77	181.77
Total			\$ 1,458.16

**Customers with 57% or Higher Increases Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
536,560	780.19	1,917.30	145.75	1,158.72	(378.53)	758.58
151,656	813.06	1,866.03	129.51	1,333.47	(520.42)	532.56
1,885	832.61	1,863.80	123.85	1,259.99	(427.38)	603.81
1,388,753	990.07	2,150.62	117.22	1,274.15	(284.08)	876.46
1,359,498	1,236.09	2,637.51	113.37	1,597.74	(361.65)	1,039.77
1,380,835	1,262.59	2,690.36	113.08	1,566.88	(304.29)	1,123.48
923,343	1,146.86	2,408.29	109.99	1,548.86	(401.99)	859.43
1,254,630	927.86	1,927.06	107.69	1,197.59	(269.73)	729.47
1,349,777	871.67	1,782.33	104.47	1,091.30	(219.63)	691.03
1,026,318	856.81	1,749.92	104.24	1,043.40	(186.58)	706.53
1,252,557	896.78	1,830.02	104.07	1,287.50	(390.72)	542.52
1,387,892	1,043.26	2,119.61	103.17	1,429.01	(385.74)	690.60
1,387,891	847.48	1,712.33	102.05	1,216.85	(369.38)	495.48
386,337	940.44	1,884.55	100.39	1,209.57	(269.13)	674.98
1,379,712	898.49	1,795.22	99.80	1,129.31	(230.81)	665.91
801,860	879.33	1,754.18	99.49	1,100.99	(221.67)	653.19
838,330	855.10	1,703.86	99.26	1,167.01	(311.91)	536.85
187,469	743.75	1,481.79	99.23	1,111.62	(367.87)	370.17
461,491	1,215.25	2,416.49	98.85	1,585.02	(369.78)	831.46
561,958	1,231.89	2,425.06	96.86	1,458.16	(226.27)	966.90
668,162	943.94	1,856.02	96.62	1,362.38	(418.44)	493.64
1,249,156	971.23	1,906.25	96.27	1,311.51	(340.28)	594.75
999,107	1,267.88	2,480.92	95.67	1,630.81	(362.93)	850.11
470,523	1,207.87	2,361.49	95.51	1,463.73	(255.87)	897.76
1,082,343	1,308.94	2,557.03	95.35	1,606.73	(297.78)	950.31
53,115	1,496.13	2,909.24	94.45	2,007.86	(511.72)	901.38
114,720	866.10	1,683.35	94.36	1,078.03	(211.93)	605.31
852,703	742.77	1,436.51	93.40	928.32	(185.55)	508.19
506,804	801.76	1,540.68	92.16	955.77	(154.00)	584.92
962,130	689.66	1,322.74	91.80	880.77	(191.12)	441.96
1,272,101	802.45	1,530.17	90.69	1,057.65	(255.20)	472.53
1,379,947	1,898.05	3,604.47	89.90	2,478.68	(580.63)	1,125.79
40,281	1,193.74	2,264.24	89.68	1,354.13	(160.39)	910.11
1,240,125	930.79	1,763.17	89.43	1,212.56	(281.77)	550.61
424,015	1,066.42	2,017.52	89.19	1,495.23	(428.81)	522.29
565,945	958.51	1,810.36	88.87	1,333.81	(375.30)	476.55
386,293	1,063.21	2,005.11	88.59	1,272.96	(209.75)	732.15
1,353,263	1,029.46	1,940.41	88.49	1,234.19	(204.73)	706.22
461,595	849.61	1,599.13	88.22	1,195.44	(345.82)	403.69
38,419	813.98	1,530.54	88.03	993.50	(179.52)	537.04
1,413,997	950.03	1,784.55	87.84	1,313.57	(363.53)	470.98
988,234	1,452.58	2,728.36	87.83	1,850.21	(397.63)	878.15
831,327	924.59	1,734.14	87.56	1,316.55	(391.97)	417.59
519,524	821.00	1,538.07	87.34	1,164.69	(343.69)	373.38
1,025,473	995.46	1,864.74	87.32	1,381.90	(386.44)	482.83
1,176,917	863.19	1,609.73	86.49	1,127.17	(263.99)	482.56
1,377,189	1,082.88	2,014.67	86.05	1,306.29	(223.41)	708.38
788,644	1,066.94	1,984.88	86.03	1,308.51	(241.57)	676.36
1,380,452	2,052.41	3,795.61	84.93	2,331.50	(279.10)	1,464.11

**Customers with 57% or Higher Increases Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
1,083,732	843.52	1,559.86	84.92	1,130.04	(286.52)	429.82
1,305,630	984.81	1,820.92	84.90	1,200.75	(215.94)	620.16
1,019,459	1,106.28	2,042.02	84.58	1,346.94	(240.66)	695.09
926,846	1,312.86	2,418.16	84.19	1,805.41	(492.54)	612.76
1,400,230	825.04	1,518.26	84.02	1,113.59	(288.55)	404.67
1,386,848	830.15	1,526.81	83.92	1,038.35	(208.19)	488.47
875,966	930.25	1,708.80	83.69	1,214.08	(283.83)	494.72
1,114,547	1,267.35	2,324.45	83.41	1,596.22	(328.87)	728.23
878,634	865.75	1,583.94	82.95	1,216.93	(351.17)	367.01
309,775	942.29	1,721.41	82.68	1,140.48	(198.19)	580.93
787,311	1,465.60	2,676.10	82.59	1,897.06	(431.47)	779.03
760,389	1,534.61	2,800.79	82.51	1,926.43	(391.82)	874.37
1,203,183	762.31	1,390.26	82.37	858.38	(96.06)	531.88
1,058,218	897.24	1,635.57	82.29	1,083.08	(185.84)	552.49
989,253	922.31	1,678.96	82.04	1,175.94	(253.63)	503.03
1,130,773	883.36	1,607.70	82.00	1,055.76	(172.40)	551.94
1,321,301	814.16	1,480.30	81.82	982.02	(167.86)	498.27
1,054,011	971.15	1,763.05	81.54	1,158.68	(187.52)	604.38
1,190,044	921.03	1,671.26	81.46	1,124.55	(203.52)	546.71
566,108	866.41	1,572.10	81.45	912.65	(46.24)	659.45
1,389,467	888.61	1,609.91	81.17	1,123.89	(235.28)	486.02
1,319,614	839.64	1,519.31	80.95	1,063.55	(223.91)	455.76
232,891	793.38	1,433.81	80.72	1,011.86	(218.49)	421.94
159,798	856.76	1,547.89	80.67	1,031.06	(174.30)	516.83
724,883	1,294.98	2,339.28	80.64	1,581.79	(286.80)	757.50
431,145	1,258.73	2,273.74	80.64	1,663.35	(404.62)	610.40
196,558	1,012.07	1,827.97	80.62	1,219.17	(207.10)	608.80
124,262	818.31	1,476.04	80.38	822.92	(4.61)	653.12
1,344,263	793.40	1,430.30	80.28	834.28	(40.88)	596.03
1,321,263	847.55	1,527.19	80.19	997.63	(150.08)	529.56
1,348,507	730.23	1,315.03	80.08	920.38	(190.15)	394.64
1,348,128	968.01	1,743.07	80.07	1,162.29	(194.28)	580.78
773,142	808.33	1,453.98	79.87	874.90	(66.57)	579.07
59,852	1,852.18	3,330.99	79.84	2,337.39	(485.21)	993.60
644,313	1,278.42	2,298.68	79.81	1,345.16	(66.74)	953.52
1,170,035	978.58	1,757.98	79.65	1,025.71	(47.13)	732.27
838,573	1,271.87	2,284.12	79.59	1,674.98	(403.11)	609.14
723,823	885.38	1,586.03	79.14	1,150.35	(264.97)	435.68
699,318	971.46	1,739.36	79.05	1,101.15	(129.69)	638.21
189,977	872.53	1,562.04	79.02	956.11	(83.58)	605.93
199,887	865.89	1,549.83	78.99	1,183.13	(317.25)	366.70
43,808	2,160.72	3,862.71	78.77	2,889.00	(728.28)	973.71
684,183	894.43	1,596.91	78.54	1,177.02	(282.59)	419.89
57,493	892.25	1,592.51	78.48	1,151.16	(258.91)	441.36
43,081	871.97	1,554.93	78.32	1,150.96	(278.99)	403.97
1,102,026	790.15	1,408.08	78.20	958.65	(168.50)	449.42
389,793	800.43	1,425.52	78.10	979.78	(179.35)	445.74
1,266,397	833.57	1,484.50	78.09	1,102.32	(268.74)	382.18
115,802	860.41	1,531.58	78.01	1,056.87	(196.46)	474.71

**Customers with 57% or Higher Increases Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
1,007,792	856.14	1,523.63	77.97	1,127.88	(271.74)	395.75
392,810	815.82	1,451.23	77.89	854.18	(38.35)	597.05
490,363	921.39	1,638.48	77.83	931.05	(9.65)	707.43
194,238	929.99	1,653.64	77.81	1,269.20	(339.21)	384.44
413,718	900.18	1,599.90	77.73	1,105.14	(204.96)	494.76
730,436	872.43	1,550.52	77.72	1,207.07	(334.64)	343.46
493,897	870.30	1,545.72	77.61	1,100.42	(230.12)	445.31
1,387,889	946.44	1,680.73	77.58	1,239.44	(293.00)	441.28
1,347,175	857.01	1,520.85	77.46	1,132.25	(275.24)	388.60
434,866	2,038.31	3,615.67	77.39	2,241.78	(203.47)	1,373.90
971,687	984.17	1,745.70	77.38	1,277.78	(293.61)	467.92
1,359,190	762.11	1,350.53	77.21	814.28	(52.17)	536.24
405,504	833.36	1,476.02	77.12	1,011.55	(178.20)	464.47
83,038	1,144.67	2,026.93	77.08	1,375.73	(231.06)	651.20
667,197	877.29	1,552.69	76.99	1,177.99	(300.70)	374.70
793,903	925.07	1,637.17	76.98	1,180.21	(255.14)	456.95
783,132	1,125.50	1,991.26	76.92	1,342.68	(217.18)	648.58
460,808	1,080.26	1,910.92	76.89	1,272.57	(192.31)	638.35
920,485	789.88	1,396.77	76.83	974.33	(184.45)	422.44
11,005	1,721.28	3,041.44	76.70	1,966.53	(245.25)	1,074.90
800,121	829.42	1,465.25	76.66	1,093.87	(264.45)	371.38
655,679	824.35	1,456.27	76.66	882.90	(58.55)	573.37
180,314	974.82	1,721.20	76.57	1,202.52	(227.70)	518.68
310,891	824.12	1,453.11	76.32	1,059.47	(235.34)	393.65
1,196,996	914.02	1,611.56	76.32	1,220.67	(306.65)	390.89
454,141	1,639.26	2,889.87	76.29	2,037.29	(398.03)	852.58
679,586	807.81	1,423.43	76.21	978.86	(171.05)	444.57
949,895	1,091.58	1,923.41	76.20	1,241.72	(150.14)	681.69
295,465	889.69	1,565.56	75.97	891.33	(1.64)	674.23
265,528	930.08	1,635.05	75.80	1,206.18	(276.11)	428.86
620,876	1,119.12	1,965.51	75.63	1,065.29	53.83	900.22
1,141,782	720.95	1,265.75	75.57	765.66	(44.71)	500.09
1,184,716	834.25	1,464.45	75.54	1,050.65	(216.40)	413.81
723,019	1,259.68	2,210.32	75.47	1,560.94	(301.25)	649.39
239,165	864.95	1,517.61	75.46	988.50	(123.55)	529.11
535,816	1,115.06	1,955.61	75.38	1,159.33	(44.27)	796.28
1,101,693	949.99	1,665.66	75.34	1,304.66	(354.67)	361.01
153,745	830.99	1,456.35	75.25	989.18	(158.20)	467.16
1,301,898	1,101.45	1,928.02	75.04	1,197.29	(95.84)	730.73
374,799	773.46	1,353.47	74.99	981.13	(207.68)	372.34
255,692	882.16	1,543.38	74.96	1,202.85	(320.69)	340.54
828,441	850.32	1,487.05	74.88	1,158.14	(307.82)	328.90
58,984	862.99	1,508.83	74.84	928.55	(65.56)	580.27
427,091	857.69	1,498.97	74.77	845.42	12.27	653.55
83,725	908.30	1,587.38	74.76	978.93	(70.63)	608.45
357,971	861.88	1,505.05	74.62	970.82	(108.95)	534.22
1,318,680	939.55	1,640.57	74.61	1,248.30	(308.75)	392.28
1,378,450	1,568.98	2,739.40	74.60	1,901.62	(332.64)	837.79
895,451	812.00	1,417.14	74.52	874.95	(62.95)	542.19

**Customers with 57% or Higher Increases Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
521,384	909.10	1,586.16	74.48	1,125.69	(216.60)	460.47
988,971	1,151.63	2,009.17	74.46	1,514.77	(363.14)	494.40
1,086,667	1,054.64	1,839.95	74.46	1,060.74	(6.10)	779.21
912,009	954.26	1,664.01	74.38	1,162.80	(208.54)	501.21
1,327,487	845.08	1,473.33	74.34	872.59	(27.50)	600.74
501,780	1,237.28	2,156.91	74.33	1,251.46	(14.18)	905.45
1,019,757	1,524.78	2,657.79	74.31	1,946.61	(421.83)	711.18
110,328	2,034.84	3,545.04	74.22	2,466.82	(431.98)	1,078.22
978,286	1,251.46	2,180.04	74.20	1,625.70	(374.25)	554.34
1,241,895	1,108.13	1,929.71	74.14	1,414.08	(305.95)	515.63
1,245,060	952.83	1,658.17	74.02	1,275.04	(322.21)	383.12
983,915	921.85	1,604.18	74.02	1,205.53	(283.68)	398.65
309,078	928.27	1,615.15	74.00	951.94	(23.67)	663.21
720,633	1,024.35	1,781.94	73.96	1,118.58	(94.23)	663.35
1,342,450	1,048.39	1,823.40	73.92	1,115.71	(67.33)	707.69
1,374,279	838.96	1,458.93	73.90	970.86	(131.91)	488.06
809,286	885.11	1,538.49	73.82	931.01	(45.89)	607.48
708,574	1,202.59	2,090.12	73.80	1,305.83	(103.24)	784.29
51,365	1,014.08	1,762.37	73.79	1,149.96	(135.88)	612.41
954,242	866.19	1,505.28	73.78	1,155.20	(289.01)	350.08
649,326	877.28	1,524.49	73.78	972.71	(95.44)	551.78
1,059,192	791.59	1,374.47	73.64	1,070.04	(278.46)	304.43
828,784	836.19	1,451.47	73.58	993.20	(157.01)	458.27
1,123,380	882.60	1,531.84	73.56	1,136.31	(253.71)	395.53
728,101	924.12	1,603.64	73.53	926.65	(2.53)	676.99
396,855	878.66	1,524.67	73.52	1,013.44	(134.78)	511.23
1,348,996	1,385.10	2,403.23	73.51	1,577.81	(192.71)	825.42
473,687	923.25	1,601.20	73.43	1,107.24	(183.99)	493.95
463,065	809.11	1,402.90	73.39	797.92	11.19	604.98
237,612	1,083.66	1,878.58	73.35	1,192.62	(108.96)	685.96
800,458	882.12	1,529.06	73.34	898.04	(15.92)	631.02
795,004	898.60	1,557.51	73.33	1,208.23	(309.64)	349.28
1,345,539	827.68	1,434.46	73.31	942.93	(115.25)	491.53
1,384,483	862.09	1,494.09	73.31	1,118.95	(256.86)	375.15
1,280,197	1,955.22	3,388.44	73.30	2,434.30	(479.09)	954.14
1,350,353	1,094.34	1,896.41	73.29	1,458.84	(364.50)	437.57
503,312	1,798.27	3,115.51	73.25	2,317.75	(519.48)	797.76
1,038,455	832.72	1,442.57	73.24	970.74	(138.02)	471.83
1,373,489	1,009.85	1,749.01	73.20	1,267.19	(257.35)	481.81
1,168,907	868.08	1,503.38	73.18	1,072.45	(204.37)	430.93
272,977	917.09	1,587.95	73.15	1,080.79	(163.70)	507.16
641,699	159.52	276.13	73.10	215.75	(56.23)	60.38
306,717	963.19	1,667.14	73.09	1,138.03	(174.84)	529.12
1,177,720	1,756.31	3,039.08	73.04	1,403.61	352.70	1,635.47
1,050,027	875.63	1,514.95	73.01	1,080.20	(204.57)	434.74
657,137	841.29	1,455.53	73.01	1,136.19	(294.89)	319.34
543,742	912.00	1,577.57	72.98	946.38	(34.38)	631.19
423,851	841.48	1,455.33	72.95	874.71	(33.23)	580.62
622,607	820.89	1,419.42	72.91	1,043.71	(222.82)	375.71



**Customers with 57% or Higher Increases Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
1,247,331	1,544.45	2,669.01	72.81	1,570.57	(26.12)	1,098.43
997,894	855.65	1,478.06	72.74	1,039.18	(183.53)	438.89
180,903	879.12	1,518.53	72.73	1,064.39	(185.27)	454.15
566,280	863.90	1,492.16	72.72	915.86	(51.96)	576.30
215,791	1,150.05	1,985.86	72.68	1,272.88	(122.83)	712.98
1,283,074	160.79	277.51	72.59	216.69	(55.90)	60.82
283,846	496.23	856.38	72.58	635.90	(139.67)	220.48
398,458	823.76	1,421.47	72.56	1,020.64	(196.88)	400.83
1,225,261	1,125.87	1,942.78	72.56	1,312.41	(186.55)	630.37
1,313,358	864.63	1,491.92	72.55	1,078.97	(214.35)	412.94
1,400,020	859.82	1,483.51	72.54	1,004.49	(144.66)	479.02
942,265	870.16	1,501.25	72.53	956.92	(86.76)	544.33
680,024	889.85	1,534.19	72.41	1,040.10	(150.25)	494.09
924,507	931.32	1,604.62	72.29	1,129.15	(197.83)	475.47
282,123	1,415.94	2,437.96	72.18	1,755.44	(339.50)	682.52
790,895	993.58	1,710.45	72.15	1,351.87	(358.29)	358.59
1,114,663	860.76	1,481.76	72.15	926.30	(65.54)	555.46
911,952	962.20	1,656.02	72.11	1,109.38	(147.18)	546.64
419,615	878.62	1,511.54	72.04	1,154.27	(275.65)	357.27
1,326,005	1,173.88	2,019.26	72.02	1,278.28	(104.40)	740.99
1,212,349	1,251.22	2,152.09	72.00	1,544.59	(293.37)	607.50
837,165	876.05	1,506.35	71.95	1,089.18	(213.12)	417.17
701,633	1,074.37	1,846.87	71.90	1,203.65	(129.28)	643.23
1,057,106	1,032.85	1,775.13	71.87	1,271.74	(238.88)	503.39
792,360	1,866.28	3,206.75	71.83	2,074.40	(208.12)	1,132.35
374,753	770.43	1,323.70	71.81	1,005.47	(235.04)	318.22
1,075,312	845.39	1,451.92	71.75	992.32	(146.93)	459.60
524,167	871.93	1,497.09	71.70	1,006.96	(135.03)	490.13
1,164,342	2,387.23	4,098.33	71.68	3,231.28	(844.05)	867.05
1,113,648	1,018.58	1,748.43	71.65	1,274.64	(256.05)	473.79
303,239	807.80	1,386.57	71.65	1,026.16	(218.36)	360.41
1,313,368	849.26	1,457.71	71.64	890.58	(41.32)	567.13
649,435	1,328.97	2,280.70	71.61	1,533.64	(204.67)	747.06
163	1,031.61	1,770.21	71.60	1,341.74	(310.12)	428.47
45,658	975.12	1,673.10	71.58	1,027.60	(52.48)	645.50
1,348,133	845.18	1,450.09	71.57	1,029.65	(184.47)	420.43
1,321,273	930.14	1,595.22	71.50	1,014.70	(84.56)	580.52
1,261,685	919.02	1,575.91	71.48	1,213.70	(294.68)	362.21
870,688	2,607.63	4,471.47	71.48	3,447.60	(839.97)	1,023.87
950,365	1,068.01	1,831.26	71.47	1,215.05	(147.04)	616.21
1,139,533	1,208.35	2,071.81	71.46	1,612.24	(403.88)	459.57
536,704	913.58	1,566.03	71.42	1,102.10	(188.52)	463.93
1,395,806	1,536.11	2,632.81	71.40	1,835.59	(299.49)	797.22
678,577	957.93	1,641.82	71.39	1,288.70	(330.77)	353.12
762,578	1,901.22	3,258.16	71.37	2,536.41	(635.19)	721.75
579,414	887.82	1,521.31	71.35	1,013.88	(126.06)	507.42
347,052	991.58	1,698.56	71.30	1,204.94	(213.36)	493.62
466,743	874.83	1,498.48	71.29	971.44	(96.61)	527.04
233,239	165.31	282.92	71.15	222.06	(56.75)	60.87

**Customers with 57% or Higher Increases Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
1,107,395	1,093.12	1,870.27	71.09	1,282.81	(189.69)	587.46
382,185	1,586.03	2,713.42	71.08	2,029.53	(443.50)	683.89
943,195	816.18	1,396.13	71.06	912.09	(95.91)	484.04
799,214	861.47	1,473.51	71.05	914.31	(52.84)	559.20
484,357	973.62	1,664.68	70.98	1,065.22	(91.59)	599.47
814,676	943.22	1,612.71	70.98	1,265.53	(322.31)	347.17
283,215	876.86	1,499.02	70.95	980.84	(103.98)	518.18
539,832	803.31	1,373.13	70.94	1,019.04	(215.74)	354.09
845,933	164.68	281.44	70.90	220.41	(55.73)	61.03
1,372,585	857.56	1,465.41	70.88	905.37	(47.81)	560.04
207,738	884.27	1,510.85	70.86	985.76	(101.48)	525.09
190,788	810.62	1,384.67	70.82	806.55	4.07	578.12
7,170	964.86	1,647.29	70.73	1,274.99	(310.13)	372.30
1,093,757	894.87	1,527.68	70.72	1,080.53	(185.66)	447.15
874,143	1,566.77	2,673.94	70.67	1,958.52	(391.75)	715.43
909,678	996.22	1,699.13	70.56	1,081.15	(84.93)	617.98
460,976	827.03	1,410.49	70.55	973.20	(146.17)	437.29
754,970	845.47	1,441.75	70.53	832.74	12.73	609.00
2,698	841.57	1,434.67	70.47	1,055.42	(213.84)	379.25
838,135	1,179.71	2,010.54	70.43	1,475.42	(295.71)	535.11
1,313,340	852.43	1,452.30	70.37	1,121.86	(269.43)	330.44
1,130,717	165.68	282.23	70.35	221.35	(55.67)	60.88
861,272	930.04	1,584.16	70.33	1,065.25	(135.22)	518.90
926,783	1,097.47	1,869.33	70.33	1,220.03	(122.56)	649.31
470,940	835.36	1,422.46	70.28	1,096.90	(261.54)	325.57
1,333,273	1,482.70	2,524.27	70.25	1,575.96	(93.27)	948.30
622,930	1,053.17	1,792.76	70.23	1,312.51	(259.34)	480.25
773,040	968.51	1,648.63	70.22	1,122.28	(153.78)	526.35
1,313,791	1,023.89	1,741.77	70.11	984.32	39.57	757.45
424,397	828.32	1,409.02	70.11	861.92	(33.60)	547.10
64,875	1,432.27	2,435.89	70.07	1,769.33	(337.06)	666.56
428,575	831.57	1,414.11	70.05	930.32	(98.75)	483.79
644,892	905.17	1,539.01	70.02	1,165.18	(260.01)	373.82
193,873	1,096.52	1,863.77	69.97	1,384.20	(287.68)	479.57
1,383,577	891.17	1,514.68	69.96	949.29	(58.12)	565.39
773,368	813.30	1,382.25	69.96	1,022.06	(208.76)	360.19
157,571	858.51	1,459.04	69.95	933.04	(74.52)	526.01
655,588	846.02	1,437.71	69.94	1,008.18	(162.16)	429.53
465,815	892.81	1,516.85	69.90	963.84	(71.03)	553.01
725,868	1,026.93	1,744.53	69.88	1,059.60	(32.67)	684.93
1,308,105	930.89	1,581.16	69.85	1,230.65	(299.77)	350.50
606,027	1,325.22	2,250.83	69.85	1,311.47	13.75	939.36
862,527	885.23	1,503.07	69.79	1,192.23	(307.00)	310.84
1,072,255	1,394.69	2,367.96	69.78	1,804.80	(410.10)	563.17
333,995	828.26	1,405.89	69.74	1,004.70	(176.45)	401.18
1,335,322	1,710.21	2,902.77	69.73	2,078.52	(368.32)	824.24
686,443	167.93	284.98	69.70	224.77	(56.84)	60.21
1,325,909	868.90	1,474.47	69.69	981.22	(112.32)	493.26
1,313,303	883.15	1,498.39	69.67	861.50	21.65	636.89

**Customers with 57% or Higher Increases Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
1,347,947	928.46	1,575.10	69.65	1,121.85	(193.38)	453.25
299,490	838.12	1,421.61	69.62	1,058.08	(219.96)	363.53
1,403,670	1,279.24	2,169.71	69.61	1,259.86	19.39	909.86
32,404	892.88	1,514.33	69.60	963.40	(70.51)	550.93
1,274,465	787.48	1,335.28	69.56	883.49	(96.01)	451.79
313,061	869.86	1,474.79	69.54	1,029.91	(160.04)	444.88
1,207,018	1,185.23	2,009.17	69.52	1,441.64	(256.41)	567.52
1,386,262	875.31	1,483.79	69.52	932.01	(56.70)	551.78
350,162	840.72	1,425.12	69.51	1,073.70	(232.98)	351.42
8,691	1,049.24	1,778.56	69.51	1,166.55	(117.31)	612.01
493,362	956.72	1,621.43	69.48	1,103.83	(147.11)	517.60
1,325,492	842.80	1,428.25	69.47	873.79	(30.99)	554.46
368,653	856.22	1,450.55	69.41	902.69	(46.47)	547.86
1,361,286	932.28	1,578.48	69.31	997.35	(65.07)	581.13
1,359,792	828.26	1,402.23	69.30	1,062.22	(233.97)	340.00
1,169,918	814.78	1,379.32	69.29	964.72	(149.94)	414.60
1,000,514	1,310.65	2,218.74	69.28	1,389.56	(78.91)	829.18
933,672	939.48	1,590.17	69.26	1,094.55	(155.07)	495.62
432,548	1,035.56	1,752.47	69.23	1,363.67	(328.11)	388.80
200,919	954.83	1,615.67	69.21	1,248.04	(293.21)	367.63
1,083,306	816.96	1,382.32	69.20	1,005.78	(188.82)	376.54
323,829	1,089.22	1,842.84	69.19	1,235.74	(146.53)	607.09
1,342,476	891.58	1,508.18	69.16	1,008.88	(117.30)	499.30
447,775	842.04	1,424.36	69.15	934.73	(92.69)	489.63
765,725	989.87	1,674.40	69.15	1,254.77	(264.90)	419.63
120,282	1,002.96	1,696.36	69.14	1,312.94	(309.98)	383.42
317,476	892.62	1,509.66	69.13	1,110.80	(218.18)	398.86
687,675	814.91	1,378.13	69.11	1,033.85	(218.94)	344.28
305,627	1,394.67	2,358.32	69.10	1,564.57	(169.91)	793.75
1,313,348	841.99	1,423.69	69.09	850.00	(8.01)	573.69
229,212	874.88	1,479.27	69.08	1,109.56	(234.68)	369.71
310,699	816.15	1,379.95	69.08	927.51	(111.36)	452.44
51,193	853.86	1,443.67	69.08	1,096.13	(242.27)	347.53
649,698	851.71	1,440.03	69.08	1,012.78	(161.07)	427.25
1,313,308	908.27	1,535.26	69.03	1,041.70	(133.43)	493.56
26,993	170.79	288.62	68.99	229.30	(58.51)	59.32
1,097,954	874.06	1,476.79	68.96	898.97	(24.91)	577.82
649,107	1,015.69	1,715.83	68.93	1,299.54	(283.85)	416.29
709,745	806.37	1,361.84	68.89	839.48	(33.12)	522.36
1,357,435	828.52	1,399.22	68.88	976.87	(148.35)	422.35
857,950	844.16	1,425.19	68.83	1,046.66	(202.50)	378.53
1,026,472	917.09	1,548.29	68.83	941.19	(24.11)	607.09
1,359,506	844.83	1,426.29	68.83	870.98	(26.15)	555.31
231,722	820.49	1,385.01	68.80	1,024.27	(203.78)	360.74
357,830	784.56	1,324.18	68.78	889.79	(105.22)	434.39
1,085,180	968.46	1,634.49	68.77	1,118.86	(150.40)	515.63
649,333	962.21	1,623.03	68.68	1,240.91	(278.70)	382.12
1,046,961	925.77	1,561.30	68.65	1,067.23	(141.46)	494.06
996,274	872.42	1,471.24	68.64	887.38	(14.96)	583.86

**Customers with 57% or Higher Increases Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
1,047,386	814.55	1,373.54	68.63	868.50	(53.95)	505.05
451,081	906.46	1,528.17	68.59	1,152.16	(245.70)	376.01
1,337,960	870.14	1,466.85	68.58	976.42	(106.28)	490.43
696,397	966.03	1,628.42	68.57	1,016.74	(50.71)	611.67
948,213	796.87	1,343.05	68.54	1,033.54	(236.67)	309.50
1,097,688	827.76	1,394.63	68.48	1,004.17	(176.42)	390.46
219,480	2,017.86	3,399.62	68.48	2,407.37	(389.51)	992.26
20,813	172.04	289.83	68.47	229.94	(57.91)	59.89
337,100	862.76	1,453.13	68.43	1,111.81	(249.05)	341.32
465,991	934.76	1,574.08	68.39	1,130.06	(195.30)	444.02
303,082	790.22	1,330.38	68.36	935.41	(145.20)	394.97
1,293,769	856.05	1,440.95	68.33	1,106.47	(250.42)	334.49
1,255,601	1,792.76	3,017.55	68.32	2,290.95	(498.19)	726.60
367,660	939.24	1,580.84	68.31	907.41	31.83	673.43
879,376	1,064.57	1,791.64	68.30	1,334.69	(270.12)	456.95
570,449	1,083.99	1,823.91	68.26	1,419.05	(335.06)	404.86
889,144	889.43	1,496.35	68.24	1,076.67	(187.24)	419.68
560,816	1,348.80	2,269.19	68.24	1,558.72	(209.92)	710.46
857,020	826.85	1,390.71	68.19	995.65	(168.80)	395.06
83,778	808.96	1,360.54	68.19	811.23	(2.27)	549.32
899,486	913.35	1,535.92	68.16	1,040.59	(127.24)	495.33
416,670	1,104.92	1,857.48	68.11	1,341.66	(236.74)	515.82
271,598	1,195.36	2,009.38	68.10	1,547.19	(351.83)	462.20
804,013	947.31	1,592.32	68.09	1,255.52	(308.21)	336.80
343,337	1,098.53	1,846.32	68.07	1,255.57	(157.04)	590.75
414,595	1,114.91	1,873.10	68.00	1,360.25	(245.33)	512.85
631,197	825.29	1,386.48	68.00	963.40	(138.11)	423.08
1,273,209	1,068.68	1,795.24	67.99	1,353.62	(284.94)	441.63
913,149	974.30	1,636.54	67.97	1,285.74	(311.44)	350.80
117,810	1,401.60	2,354.23	67.97	1,491.47	(89.88)	862.76
184,466	754.75	1,267.68	67.96	994.35	(239.60)	273.33
1,050,825	172.55	289.70	67.89	227.28	(54.73)	62.42
1,195,505	864.33	1,451.14	67.89	839.53	24.80	611.61
847,892	876.96	1,472.31	67.89	1,115.07	(238.11)	357.24
1,196,088	911.40	1,529.84	67.86	930.39	(18.99)	599.45
733,536	1,449.18	2,432.45	67.85	1,602.55	(153.36)	829.90
37,412	812.27	1,363.20	67.83	975.50	(163.23)	387.70
499,070	840.58	1,410.35	67.78	870.78	(30.20)	539.58
533,467	824.10	1,382.49	67.76	835.08	(10.98)	547.41
972,136	852.15	1,429.14	67.71	838.14	14.02	591.00
3,771	1,186.53	1,989.89	67.71	1,348.13	(161.60)	641.77
1,395,043	1,018.20	1,707.59	67.71	1,037.54	(19.34)	670.05
1,310,833	1,068.26	1,791.41	67.69	1,200.41	(132.15)	591.00
1,141,860	1,086.47	1,821.67	67.67	1,142.07	(55.59)	679.60
730,744	1,513.33	2,537.36	67.67	1,953.95	(440.62)	583.41
463,741	174.22	292.06	67.64	224.53	(50.31)	67.53
453,288	1,157.47	1,939.95	67.60	1,354.20	(196.73)	585.75
410,003	860.13	1,441.53	67.59	975.71	(115.58)	465.82
1,345,078	957.29	1,604.22	67.58	1,148.58	(191.29)	455.64

**Customers with 57% or Higher Increases Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
460,447	769.59	1,289.42	67.55	861.38	(91.79)	428.03
168,789	173.74	291.09	67.54	225.06	(51.31)	66.03
952,714	838.95	1,405.47	67.53	801.05	37.90	604.42
947,394	894.44	1,498.29	67.51	902.52	(8.08)	595.78
712,642	809.28	1,355.48	67.49	967.57	(158.28)	387.91
1,321,297	908.62	1,521.59	67.46	942.63	(34.01)	578.96
1,067,125	857.96	1,435.72	67.34	992.75	(134.79)	442.97
826,242	863.49	1,444.90	67.33	880.53	(17.04)	564.37
331,751	1,037.00	1,734.88	67.30	1,160.67	(123.67)	574.21
84,122	959.77	1,605.65	67.30	1,068.26	(108.49)	537.39
495,014	1,157.23	1,935.74	67.27	1,261.07	(103.83)	674.67
644,391	1,014.95	1,697.71	67.27	1,331.30	(316.35)	366.41
127,736	1,220.77	2,041.68	67.25	1,616.94	(396.17)	424.74
1,313,319	896.62	1,499.10	67.19	1,091.81	(195.19)	407.29
790,340	876.68	1,465.62	67.18	1,077.25	(200.56)	388.38
743,265	777.56	1,299.71	67.15	888.30	(110.73)	411.42
25,322	837.37	1,399.63	67.14	915.11	(77.74)	484.51
544,040	782.61	1,307.85	67.12	988.91	(206.31)	318.94
1,313,299	894.27	1,494.33	67.10	1,133.35	(239.08)	360.99
376,572	944.24	1,577.64	67.08	1,047.17	(102.92)	530.47
790,583	844.73	1,411.10	67.05	829.28	15.45	581.83
1,416,706	955.62	1,596.19	67.03	1,165.88	(210.26)	430.31
1,102,390	1,143.45	1,909.82	67.02	1,381.98	(238.53)	527.84
1,349,797	1,280.06	2,137.96	67.02	1,461.64	(181.59)	676.32
500,680	937.96	1,566.59	67.02	1,133.81	(195.85)	432.78
140,273	817.76	1,365.08	66.93	946.14	(128.38)	418.93
1,232,943	926.33	1,546.22	66.92	1,036.82	(110.50)	509.40
574,299	950.96	1,587.34	66.92	1,237.44	(286.48)	349.89
493,411	1,119.51	1,868.67	66.92	1,182.26	(62.75)	686.41
349,121	1,222.86	2,041.11	66.91	1,498.74	(275.89)	542.37
141,189	1,030.05	1,719.03	66.89	981.63	48.42	737.41
508,686	838.58	1,399.47	66.88	1,046.60	(208.02)	352.86
512,085	1,100.01	1,835.51	66.86	1,417.35	(317.34)	418.17
1,345,511	928.28	1,548.62	66.83	1,096.45	(168.17)	452.16
926,627	837.44	1,396.89	66.81	1,045.89	(208.45)	351.00
504,048	985.26	1,643.09	66.77	1,004.29	(19.03)	638.80
1,313,899	888.56	1,481.68	66.75	913.27	(24.71)	568.41
47,691	864.82	1,441.94	66.73	989.93	(125.11)	452.01
172,677	824.70	1,374.94	66.72	876.15	(51.45)	498.79
362,201	988.20	1,647.15	66.68	1,016.55	(28.36)	630.59
789,878	1,405.25	2,342.19	66.67	1,613.58	(208.33)	728.61
1,261,148	844.12	1,406.79	66.66	830.48	13.63	576.31
962,278	1,304.64	2,173.78	66.62	1,505.40	(200.76)	668.39
952,887	175.70	292.70	66.59	226.47	(50.77)	66.23
491,429	923.12	1,537.51	66.55	1,177.50	(254.38)	360.01
820,166	920.98	1,533.83	66.54	1,125.50	(204.53)	408.33
1,196,407	806.61	1,343.22	66.53	979.87	(173.26)	363.36
864,715	177.76	295.92	66.47	226.96	(49.20)	68.96
310,480	1,183.90	1,970.72	66.46	1,337.44	(153.54)	633.28



**Customers with 57% or Higher Increases Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
521,885	865.76	1,440.91	66.43	848.51	17.24	592.40
960,910	961.30	1,599.79	66.42	1,099.64	(138.34)	500.14
1,090,311	932.00	1,550.90	66.41	932.28	(0.28)	618.62
1,313,313	999.52	1,663.18	66.40	1,014.20	(14.68)	648.98
111,034	821.96	1,367.47	66.37	1,028.69	(206.73)	338.78
720,943	814.75	1,355.13	66.32	1,081.52	(266.77)	273.61
1,286,438	899.98	1,496.84	66.32	1,056.18	(156.20)	440.66
76,836	832.52	1,384.55	66.31	1,038.93	(206.42)	345.62
640,135	912.77	1,517.97	66.30	1,087.96	(175.19)	430.01
310,054	864.60	1,437.54	66.27	837.95	26.65	599.59
615,704	873.36	1,452.00	66.26	1,109.91	(236.55)	342.09
875,571	985.91	1,638.98	66.24	1,311.99	(326.08)	326.99
1,313,380	1,100.55	1,829.21	66.21	1,115.10	(14.54)	714.11
613,071	985.89	1,638.47	66.19	1,131.17	(145.28)	507.30
1,313,898	973.63	1,618.03	66.19	1,156.81	(183.18)	461.23
1,100,811	864.91	1,437.25	66.17	840.78	24.13	596.47
715,103	863.96	1,435.50	66.15	849.61	14.36	585.89
630,838	1,042.66	1,732.37	66.15	1,348.26	(305.60)	384.11
93,377	791.86	1,315.48	66.13	859.98	(68.12)	455.50
234,561	178.26	296.13	66.13	235.25	(57.00)	60.88
257,962	956.67	1,589.08	66.11	1,152.33	(195.67)	436.75
1,254,913	842.63	1,399.63	66.10	1,097.37	(254.73)	302.26
423,106	890.88	1,479.76	66.10	806.29	84.59	673.47
1,224,227	967.51	1,607.01	66.10	1,160.81	(193.30)	446.20
1,138,026	179.63	298.34	66.08	233.76	(54.13)	64.58
634,920	909.32	1,510.08	66.07	1,107.35	(198.03)	402.73
830,484	180.81	300.26	66.06	239.43	(58.62)	60.83
1,225,642	857.32	1,423.42	66.03	1,104.15	(246.83)	319.27
25,493	894.17	1,484.57	66.03	898.33	(4.16)	586.24
1,241,978	1,025.38	1,702.29	66.02	1,351.63	(326.24)	350.66
202,747	723.39	1,200.81	66.00	790.38	(66.99)	410.43
932,498	901.53	1,496.29	65.97	1,037.76	(136.23)	458.53
612,448	832.77	1,382.14	65.97	1,072.18	(239.41)	309.96
1,005,105	1,386.76	2,301.35	65.95	1,840.34	(453.58)	461.01
1,313,322	859.14	1,425.57	65.93	936.51	(77.37)	489.06
30,950	1,150.90	1,909.53	65.92	1,208.63	(57.74)	700.89
456,599	887.11	1,471.83	65.91	1,160.75	(273.64)	311.08
488,637	950.53	1,576.63	65.87	1,033.18	(82.65)	543.45
671,604	916.59	1,520.26	65.86	1,199.19	(282.60)	321.07
151,674	1,116.83	1,852.24	65.85	1,242.49	(125.66)	609.76
1,203,986	864.75	1,434.16	65.85	1,073.40	(208.65)	360.75
33,203	1,000.50	1,658.93	65.81	1,004.49	(3.98)	654.44
959,015	844.04	1,399.43	65.80	915.43	(71.39)	484.00
875,775	825.41	1,368.46	65.79	979.77	(154.36)	388.68
457,322	1,048.66	1,738.49	65.78	1,250.91	(202.25)	487.58
117,379	812.62	1,347.05	65.77	967.95	(155.33)	379.10
871,344	1,046.14	1,733.75	65.73	1,177.81	(131.67)	555.94
1,095,925	1,375.35	2,279.32	65.73	1,594.43	(219.08)	684.89
695,535	180.02	298.30	65.71	227.93	(47.91)	70.37



**Customers with 57% or Higher Increases Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
1,313,332	832.83	1,380.04	65.70	896.17	(63.34)	483.87
634,187	1,024.66	1,697.79	65.69	983.67	40.99	714.12
461,041	180.05	298.31	65.68	228.41	(48.36)	69.90
315,676	889.94	1,474.47	65.68	1,018.24	(128.30)	456.23
19,645	180.42	298.83	65.64	236.72	(56.30)	62.12
86,373	925.51	1,532.94	65.63	1,158.32	(232.81)	374.63
1,070,269	989.44	1,638.48	65.60	1,233.93	(244.49)	404.55
69,856	1,043.44	1,727.79	65.59	1,335.68	(292.24)	392.11
210,221	1,025.36	1,697.64	65.56	1,207.11	(181.75)	490.53
999,231	845.07	1,399.08	65.56	858.01	(12.94)	541.07
745,342	843.17	1,395.84	65.55	884.33	(41.16)	511.51
278,185	890.49	1,474.16	65.54	1,045.39	(154.90)	428.76
133,362	1,091.48	1,806.79	65.53	1,385.72	(294.24)	421.06
1,342,281	1,121.22	1,855.78	65.51	1,122.54	(1.32)	733.24
1,396,471	807.02	1,335.70	65.51	923.11	(116.09)	412.59
1,201,655	1,768.55	2,927.13	65.51	2,252.64	(484.09)	674.49
887,317	861.73	1,426.11	65.49	887.19	(25.46)	538.92
768,183	1,817.04	3,006.51	65.46	2,389.74	(572.70)	616.77
166,068	750.32	1,241.30	65.44	940.79	(190.46)	300.51
778,992	1,477.13	2,443.41	65.42	1,561.05	(83.92)	882.36
1,232,239	1,338.70	2,214.13	65.39	1,684.63	(345.93)	529.51
837,377	180.10	297.84	65.37	228.53	(48.43)	69.31
634,231	1,038.51	1,717.07	65.34	1,333.25	(294.75)	383.82
839,680	866.57	1,432.53	65.31	1,098.94	(232.37)	333.59
873,771	1,074.48	1,776.17	65.31	1,157.19	(82.71)	618.98
985,314	1,795.65	2,968.17	65.30	2,059.51	(263.86)	908.66
632,122	885.45	1,463.56	65.29	1,059.63	(174.18)	403.94
307,267	1,211.11	2,001.43	65.26	1,343.63	(132.52)	657.80
677,800	880.55	1,455.11	65.25	1,095.43	(214.88)	359.68
711,952	428.06	707.32	65.24	476.83	(48.77)	230.49
1,122,882	181.60	300.06	65.23	231.70	(50.10)	68.36
1,319,998	943.46	1,558.79	65.22	1,216.72	(273.25)	342.08
908,658	1,242.82	2,053.27	65.21	1,296.04	(53.22)	757.23
133,636	1,170.32	1,933.35	65.20	1,462.43	(292.11)	470.92
193,916	899.86	1,486.54	65.20	898.77	1.10	587.77
1,129,622	813.74	1,344.09	65.17	986.11	(172.37)	357.99
1,061,974	882.53	1,457.57	65.16	983.29	(100.77)	474.27
320,699	1,961.87	3,239.74	65.14	2,248.17	(286.31)	991.57
259,196	818.77	1,351.95	65.12	903.67	(84.90)	448.28
780,580	935.44	1,544.58	65.12	1,147.37	(211.93)	397.21
655,967	1,090.93	1,801.14	65.10	1,127.96	(37.03)	673.18
888,662	946.32	1,562.24	65.09	1,237.08	(290.76)	325.16
1,031,049	854.87	1,411.03	65.06	988.96	(134.08)	422.07
1,149,247	830.58	1,370.91	65.05	937.91	(107.33)	433.00
1,313,668	1,933.07	3,189.94	65.02	2,471.18	(538.11)	718.76
583,879	801.93	1,323.26	65.01	872.69	(70.76)	450.57
714,281	903.94	1,491.32	64.98	1,075.57	(171.62)	415.75
98,140	958.48	1,581.23	64.97	1,089.84	(131.36)	491.39
863,233	879.98	1,451.69	64.97	1,045.31	(165.33)	406.38

**Customers with 57% or Higher Increases Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
527,926	1,254.42	2,069.03	64.94	1,556.17	(301.75)	512.86
1,372,587	861.30	1,420.36	64.91	1,072.31	(211.01)	348.05
899,280	823.04	1,357.22	64.90	1,083.16	(260.12)	274.06
222,393	825.16	1,360.70	64.90	998.45	(173.30)	362.25
1,053,793	991.93	1,635.67	64.90	1,128.36	(136.43)	507.31
11,139	810.78	1,336.73	64.87	938.41	(127.63)	398.32
146,489	847.24	1,396.84	64.87	835.23	12.01	561.61
219,555	1,444.97	2,381.84	64.84	1,866.26	(421.29)	515.59
675,936	1,072.58	1,767.61	64.80	1,276.68	(204.10)	490.93
464,110	1,348.23	2,220.84	64.72	1,711.36	(363.13)	509.48
1,395,775	1,134.28	1,867.73	64.66	1,316.31	(182.03)	551.42
650,025	1,083.17	1,783.55	64.66	1,265.45	(182.28)	518.11
1,052,693	1,071.81	1,764.76	64.65	1,204.82	(133.01)	559.94
671,577	799.80	1,316.88	64.65	961.11	(161.31)	355.77
760,292	823.71	1,356.23	64.65	805.81	17.90	550.41
160,078	920.69	1,515.80	64.64	1,096.69	(176.00)	419.11
1,039,506	184.65	303.97	64.62	239.82	(55.17)	64.15
823,543	887.39	1,460.77	64.61	1,116.91	(229.52)	343.86
1,313,889	843.70	1,388.58	64.58	832.50	11.21	556.08
1,102,183	960.58	1,580.88	64.58	1,103.89	(143.32)	476.99
59,932	828.13	1,362.88	64.57	903.01	(74.88)	459.87
21,146	843.03	1,387.21	64.55	1,020.72	(177.69)	366.49
6,832	879.72	1,447.30	64.52	1,078.40	(198.67)	368.90
470,125	1,947.62	3,203.64	64.49	2,308.34	(360.72)	895.30
1,318,653	832.30	1,369.03	64.49	923.29	(90.99)	445.75
1,360,652	838.22	1,378.22	64.42	920.94	(82.72)	457.28
1,362,216	953.89	1,568.30	64.41	1,122.42	(168.53)	445.88
912,988	911.59	1,498.66	64.40	1,020.38	(108.79)	478.29
84,607	1,377.65	2,264.71	64.39	1,399.13	(21.48)	865.58
911,068	1,127.45	1,853.16	64.37	1,363.23	(235.78)	489.92
1,399,753	893.55	1,468.64	64.36	1,174.37	(280.82)	294.26
371,641	1,247.57	2,050.27	64.34	1,375.92	(128.35)	674.35
9,801	799.79	1,314.29	64.33	977.50	(177.71)	336.78
644,101	1,012.63	1,663.88	64.31	1,140.44	(127.81)	523.43
162,842	880.78	1,447.13	64.30	1,151.50	(270.73)	295.63
386,494	1,001.09	1,644.74	64.29	1,170.29	(169.20)	474.45
594,658	838.33	1,377.31	64.29	778.47	59.86	598.84
591,750	1,154.91	1,897.39	64.29	1,158.78	(3.87)	738.62
460,031	1,003.86	1,648.98	64.26	1,223.16	(219.30)	425.82
950,949	1,122.87	1,844.28	64.25	1,291.42	(168.55)	552.86
1,056,959	935.87	1,536.93	64.23	1,234.84	(298.98)	302.09
1,399,395	861.37	1,414.57	64.22	1,093.59	(232.23)	320.98
22,103	1,004.98	1,650.42	64.22	1,041.21	(36.23)	609.21
480,390	1,033.03	1,696.19	64.20	1,100.27	(67.24)	595.92
1,313,365	791.81	1,300.08	64.19	891.31	(99.50)	408.77
1,014,306	812.02	1,333.12	64.17	821.14	(9.12)	511.98
10,044	1,004.18	1,648.59	64.17	1,115.51	(111.33)	533.08
199,560	186.08	305.49	64.17	244.37	(58.29)	61.12
320,018	841.42	1,381.34	64.17	853.03	(11.60)	528.31

**Customers with 57% or Higher Increases Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
1,015,052	853.25	1,400.60	64.15	914.47	(61.22)	486.14
656,056	869.54	1,427.27	64.14	1,084.02	(214.48)	343.25
1,370,401	989.22	1,623.63	64.13	1,211.04	(221.82)	412.59
1,305,515	1,043.64	1,712.91	64.13	1,115.94	(72.30)	596.97
568,155	1,028.01	1,687.17	64.12	1,223.30	(195.28)	463.87
1,075,416	981.83	1,611.26	64.11	989.90	(8.07)	621.36
925,208	977.57	1,604.26	64.11	1,192.99	(215.41)	411.27
172,969	893.22	1,465.81	64.10	972.97	(79.76)	492.83
397,466	888.08	1,457.13	64.08	1,106.40	(218.32)	350.73
316,354	891.45	1,462.52	64.06	963.07	(71.62)	499.46
305,981	1,256.49	2,060.98	64.03	1,637.60	(381.10)	423.38
415,210	1,131.40	1,855.73	64.02	1,249.78	(118.38)	605.96
653,042	1,162.53	1,906.79	64.02	1,324.05	(161.52)	582.73
397,459	842.07	1,381.14	64.02	907.41	(65.34)	473.74
819,764	951.74	1,560.92	64.01	1,005.32	(53.58)	555.60
556,349	866.11	1,420.47	64.01	1,041.12	(175.01)	379.35
1,265,479	1,317.77	2,160.55	63.96	1,319.86	(2.09)	840.69
1,283,312	892.05	1,462.51	63.95	1,056.82	(164.77)	405.69
1,088,578	878.77	1,440.65	63.94	944.18	(65.41)	496.47
450,827	828.35	1,357.93	63.93	828.59	(0.24)	529.34
281,941	864.22	1,416.71	63.93	892.67	(28.45)	524.03
1,049,192	881.76	1,445.43	63.93	1,107.77	(226.02)	337.66
798,083	1,171.88	1,920.95	63.92	1,095.86	76.01	825.09
1,179,777	887.67	1,455.05	63.92	879.35	8.31	575.69
1,310,564	1,391.00	2,280.09	63.92	1,765.55	(374.55)	514.54
225,365	1,006.19	1,649.30	63.91	1,090.07	(83.88)	559.23
536,534	899.78	1,474.81	63.91	990.23	(90.46)	484.58
197,399	1,047.54	1,717.00	63.91	1,253.61	(206.07)	463.39
493,049	859.51	1,408.76	63.90	1,058.73	(199.22)	350.03
1,096,541	1,837.01	3,010.68	63.89	2,073.52	(236.51)	937.16
1,070,762	1,215.72	1,992.41	63.89	1,394.14	(178.42)	598.27
197,783	866.97	1,420.84	63.89	1,054.03	(187.06)	366.81
561,208	1,732.02	2,837.67	63.84	1,755.78	(23.76)	1,081.89
1,201,560	1,070.70	1,754.13	63.83	1,266.83	(196.13)	487.30
1,325,549	828.14	1,356.73	63.83	1,053.96	(225.82)	302.77
54,768	878.76	1,439.46	63.81	928.05	(49.30)	511.41
866,444	837.03	1,371.03	63.80	872.38	(35.36)	498.65
1,346,082	914.38	1,497.71	63.80	979.97	(65.59)	517.74
339,284	812.91	1,331.45	63.79	868.15	(55.24)	463.30
794,736	903.50	1,479.74	63.78	1,114.68	(211.18)	365.07
1,176,919	844.29	1,382.70	63.77	846.63	(2.34)	536.07
1,188,418	842.66	1,379.90	63.76	834.61	8.05	545.29
1,296,667	870.51	1,425.47	63.75	1,066.46	(195.95)	359.00
498,210	820.66	1,343.83	63.75	1,014.50	(193.84)	329.33
644,403	3,650.84	5,977.38	63.73	3,841.16	(190.33)	2,136.22
294,585	863.17	1,413.23	63.72	829.70	33.47	583.52
1,321,275	868.61	1,422.12	63.72	933.28	(64.66)	488.84
366,448	950.51	1,556.16	63.72	1,246.67	(296.16)	309.50
374,827	1,686.15	2,760.19	63.70	2,164.15	(478.00)	596.04

**Customers with 57% or Higher Increases Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
146,130	988.49	1,618.13	63.70	1,088.44	(99.95)	529.69
83,433	866.81	1,418.74	63.67	992.37	(125.56)	426.38
1,345,004	916.83	1,500.50	63.66	1,004.50	(87.67)	496.00
1,017,868	933.54	1,527.78	63.66	1,176.00	(242.47)	351.78
295,263	861.53	1,409.83	63.64	861.88	(0.36)	547.95
1,098,111	1,407.68	2,303.47	63.64	1,842.72	(435.04)	460.75
1,081,929	933.20	1,526.95	63.63	1,138.02	(204.82)	388.93
245,623	1,740.28	2,847.45	63.62	2,292.53	(552.25)	554.92
1,181,528	885.37	1,448.57	63.61	958.68	(73.31)	489.89
333,948	911.62	1,491.38	63.60	993.85	(82.23)	497.53
1,144,257	833.30	1,363.20	63.59	926.59	(93.29)	436.60
46,741	187.84	307.28	63.59	247.53	(59.69)	59.76
20,148	1,093.08	1,788.07	63.58	1,295.92	(202.85)	492.15
1,165,807	187.21	306.21	63.57	234.56	(47.35)	71.65
740,747	841.22	1,375.90	63.56	865.30	(24.08)	510.60
250,333	187.40	306.51	63.56	242.36	(54.96)	64.15
1,362,280	187.04	305.92	63.56	232.50	(45.46)	73.42
320,400	879.66	1,438.57	63.54	994.48	(114.82)	444.09
504,489	1,486.95	2,431.53	63.52	1,910.73	(423.78)	520.80
255,433	906.76	1,482.75	63.52	974.02	(67.25)	508.73
114,762	845.49	1,382.51	63.52	926.03	(80.54)	456.47
1,242,247	894.29	1,462.16	63.50	1,002.56	(108.27)	459.60
806,920	831.15	1,358.88	63.49	923.03	(91.88)	435.85
205,227	798.96	1,306.14	63.48	878.48	(79.52)	427.65
610,248	1,048.49	1,714.06	63.48	1,281.86	(233.36)	432.20
1,392,050	1,140.60	1,864.17	63.44	1,410.10	(269.50)	454.08
708,107	840.76	1,374.04	63.43	864.23	(23.47)	509.81
686,048	878.02	1,434.81	63.41	1,133.24	(255.22)	301.56
713,549	889.66	1,453.79	63.41	927.27	(37.60)	526.52
541,518	1,007.47	1,646.29	63.41	1,288.20	(280.73)	358.09
153,194	1,009.57	1,649.72	63.41	915.66	93.91	734.05
386,648	188.54	308.08	63.40	247.16	(58.62)	60.92
1,321,307	837.76	1,368.86	63.40	973.39	(135.63)	395.47
855,228	878.05	1,434.62	63.39	1,053.30	(175.25)	381.32
1,347,892	869.52	1,420.61	63.38	964.02	(94.51)	456.58
197,939	843.87	1,378.67	63.38	937.20	(93.34)	441.47
813,406	868.70	1,419.20	63.37	911.35	(42.64)	507.85
33,036	914.47	1,493.93	63.37	1,131.46	(217.00)	362.47
1,049,358	1,015.14	1,658.36	63.36	1,208.06	(192.92)	450.30
547,775	944.96	1,543.68	63.36	968.11	(23.15)	575.57
853,103	1,531.10	2,501.14	63.36	1,935.69	(404.59)	565.45
613,752	877.40	1,433.29	63.36	977.74	(100.34)	455.55
386,609	833.27	1,361.09	63.34	1,061.15	(227.88)	299.94
83,292	189.20	309.03	63.34	246.98	(57.78)	62.05
321,027	996.39	1,627.44	63.33	1,073.73	(77.34)	553.70
900,987	846.45	1,382.53	63.33	900.28	(53.83)	482.25
1,109,263	187.68	306.52	63.32	238.11	(50.44)	68.40
1,337,098	943.64	1,541.07	63.31	1,117.79	(174.15)	423.28
1,345,499	861.69	1,406.85	63.27	1,034.44	(172.75)	372.42

**Customers with 57% or Higher Increases Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
1,330,799	2,365.13	3,861.43	63.27	2,538.34	(173.21)	1,323.09
1,346,792	952.59	1,555.15	63.25	1,010.32	(57.73)	544.83
610,151	880.45	1,437.34	63.25	1,022.81	(142.36)	414.53
171,673	909.82	1,485.26	63.25	1,024.97	(115.14)	460.29
686,081	1,152.00	1,880.56	63.24	1,238.20	(86.21)	642.35
200,004	842.70	1,375.53	63.23	1,010.37	(167.67)	365.16
580,486	832.14	1,358.29	63.23	851.48	(19.33)	506.81
374,823	875.17	1,428.38	63.21	1,146.72	(271.55)	281.66
1,140,422	903.22	1,474.07	63.20	1,087.66	(184.44)	386.41
1,387,090	833.77	1,360.55	63.18	1,067.30	(233.53)	293.25
1,184,096	853.58	1,392.86	63.18	995.60	(142.02)	397.26
687,430	1,196.34	1,952.09	63.17	1,086.36	109.98	865.73
1,324,897	923.43	1,506.74	63.17	1,085.70	(162.27)	421.04
1,055,794	855.27	1,395.48	63.16	1,061.33	(206.05)	334.15
662,774	854.72	1,394.52	63.15	1,060.48	(205.76)	334.04
1,193,518	188.30	307.22	63.15	245.45	(57.15)	61.77
1,313,323	962.76	1,570.62	63.14	922.18	40.58	648.44
1,350,574	1,034.03	1,686.78	63.13	1,309.62	(275.59)	377.16
1,179,982	1,063.83	1,735.29	63.12	1,312.27	(248.44)	423.02
409,988	840.19	1,370.46	63.11	886.70	(46.51)	483.76
1,313,779	851.03	1,388.04	63.10	1,012.36	(161.33)	375.68
1,217,453	909.16	1,482.56	63.07	1,084.12	(174.96)	398.44
8,885	1,387.70	2,262.67	63.05	1,626.97	(239.28)	635.70
417,308	1,269.72	2,069.97	63.03	1,454.44	(184.72)	615.53
599,689	1,344.24	2,191.41	63.02	1,300.51	43.73	890.90
735,516	914.20	1,490.30	63.02	1,075.30	(161.10)	415.00
1,009,041	189.24	308.49	63.01	247.98	(58.73)	60.51
1,090,776	955.24	1,557.02	63.00	1,170.52	(215.28)	386.50
715,125	788.50	1,285.15	62.99	793.00	(4.50)	492.16
1,095,758	1,595.77	2,600.83	62.98	1,656.54	(60.77)	944.29
729,533	849.84	1,385.09	62.98	925.44	(75.60)	459.64
715,904	929.74	1,515.26	62.98	922.02	7.72	593.24
1,176,154	1,138.44	1,855.33	62.97	1,218.07	(79.63)	637.26
970,501	890.49	1,451.07	62.95	947.91	(57.42)	503.16
1,086,423	870.31	1,418.05	62.94	929.38	(59.07)	488.68
1,013,001	813.89	1,326.08	62.93	894.30	(80.41)	431.78
1,130,473	934.01	1,521.75	62.93	1,112.14	(178.12)	409.61
366,836	833.49	1,357.90	62.92	958.39	(124.90)	399.51
692,348	890.13	1,450.16	62.92	962.79	(72.67)	487.37
791,635	941.44	1,533.54	62.89	914.69	26.75	618.85
866,425	1,155.28	1,881.85	62.89	1,315.24	(159.96)	566.61
1,360,573	931.06	1,516.54	62.88	1,205.52	(274.46)	311.01
1,313,315	980.77	1,597.38	62.87	1,075.71	(94.94)	521.67
686,137	820.19	1,335.82	62.87	804.25	15.94	531.57
975,579	1,209.76	1,970.24	62.86	1,471.29	(261.53)	498.95
43,492	1,034.75	1,685.17	62.86	1,325.40	(290.64)	359.78
1,316,405	946.99	1,542.11	62.84	1,207.26	(260.26)	334.86
108,039	807.52	1,314.97	62.84	976.32	(168.81)	338.64
930,439	916.26	1,492.00	62.84	936.37	(20.12)	555.63



**Customers with 57% or Higher Increases Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
465,905	1,431.64	2,331.12	62.83	1,686.30	(254.66)	644.82
823,441	935.15	1,522.48	62.81	969.18	(34.03)	553.30
431,315	1,021.20	1,662.35	62.78	1,153.05	(131.85)	509.30
121,521	189.78	308.90	62.77	239.94	(50.16)	68.96
634,348	772.42	1,257.19	62.76	850.12	(77.70)	407.07
1,397,961	848.39	1,380.73	62.75	863.17	(14.78)	517.56
406,218	909.35	1,479.91	62.74	1,024.91	(115.57)	455.00
338,779	845.98	1,376.71	62.74	997.92	(151.94)	378.80
208,804	935.85	1,522.92	62.73	1,054.67	(118.82)	468.24
988,990	1,038.50	1,689.87	62.72	1,244.93	(206.42)	444.94
347,229	890.87	1,449.58	62.71	1,102.89	(212.01)	346.70
1,258,495	1,249.96	2,033.82	62.71	1,307.51	(57.54)	726.31
1,387,254	1,035.38	1,684.60	62.70	1,054.27	(18.88)	630.33
1,341,297	843.04	1,371.57	62.69	1,062.48	(219.44)	309.09
1,307,539	962.80	1,566.35	62.69	1,068.94	(106.13)	497.41
1,386,608	795.52	1,294.19	62.69	847.36	(51.84)	446.84
992,818	885.28	1,440.05	62.67	904.07	(18.80)	535.97
872,133	941.03	1,530.73	62.67	1,005.74	(64.72)	524.99
1,080,992	1,032.34	1,679.19	62.66	1,123.82	(91.48)	555.37
126,442	928.68	1,510.54	62.65	1,016.56	(87.89)	493.97
1,201,681	1,000.35	1,627.06	62.65	1,303.73	(303.38)	323.32
777,491	1,035.34	1,683.94	62.65	1,117.05	(81.71)	566.89
799,759	1,227.40	1,996.29	62.64	1,422.19	(194.80)	574.10
1,313,344	1,005.59	1,635.52	62.64	1,019.27	(13.68)	616.26
19,954	2,185.55	3,554.23	62.62	2,834.28	(648.74)	719.94
676,393	994.95	1,617.94	62.62	1,223.56	(228.61)	394.39
679,150	948.92	1,543.07	62.61	1,052.93	(104.00)	490.15
56,687	960.12	1,561.28	62.61	1,192.03	(231.90)	369.25
1,274,633	896.79	1,458.27	62.61	1,094.40	(197.62)	363.86
342,127	877.38	1,426.66	62.60	875.17	2.22	551.49
161,886	891.58	1,449.57	62.59	1,000.38	(108.80)	449.20
713,279	1,414.81	2,300.24	62.58	1,488.50	(73.69)	811.74
422,611	190.78	310.14	62.56	245.78	(55.00)	64.36
897,455	883.89	1,436.70	62.54	1,068.75	(184.87)	367.95
326,300	1,025.02	1,666.02	62.54	1,192.73	(167.71)	473.29
185,006	1,209.57	1,965.93	62.53	1,439.38	(229.82)	526.55
726,618	901.70	1,465.53	62.53	976.66	(74.96)	488.87
1,321,276	885.88	1,439.78	62.53	973.02	(87.14)	466.76
435,627	863.42	1,403.22	62.52	1,076.16	(212.74)	327.05
653,781	919.35	1,494.10	62.52	1,015.78	(96.44)	478.31
247,824	863.03	1,402.53	62.51	862.21	0.82	540.31
687,097	1,373.22	2,231.32	62.49	1,750.97	(377.75)	480.35
83,714	1,012.03	1,644.37	62.48	1,279.13	(267.10)	365.24
673,334	866.41	1,407.73	62.48	1,029.39	(162.97)	378.34
988,771	1,132.71	1,840.38	62.48	1,224.13	(91.42)	616.25
228,483	1,081.03	1,756.30	62.47	1,087.24	(6.21)	669.06
347,351	888.60	1,443.60	62.46	1,103.20	(214.60)	340.40
172,762	849.62	1,380.26	62.46	825.60	24.02	554.66
367,158	868.90	1,411.56	62.45	1,069.76	(200.85)	341.81



**Customers with 57% or Higher Increases Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
227,084	1,337.95	2,173.50	62.45	1,548.90	(210.95)	624.60
158,322	1,098.09	1,783.77	62.44	1,272.68	(174.58)	511.09
724,056	810.74	1,316.94	62.44	894.54	(83.80)	422.41
189,064	796.71	1,294.13	62.43	798.52	(1.82)	495.61
1,252,912	1,212.96	1,970.14	62.42	1,477.52	(264.57)	492.62
233,722	895.91	1,455.12	62.42	1,073.16	(177.25)	381.96
1,316,245	958.96	1,557.37	62.40	1,061.79	(102.83)	495.58
57,384	1,484.07	2,409.50	62.36	1,904.49	(420.43)	505.00
1,235,381	2,139.24	3,473.02	62.35	2,524.42	(385.19)	948.60
599,964	968.02	1,571.54	62.35	999.60	(31.57)	571.94
1,377,067	951.49	1,544.70	62.34	1,183.39	(231.90)	361.31
951,289	1,042.38	1,692.12	62.33	1,168.63	(126.25)	523.49
1,011,189	1,007.49	1,635.39	62.32	1,086.04	(78.55)	549.35
1,108,866	888.54	1,442.30	62.32	993.72	(105.18)	448.58
1,041,272	190.33	308.93	62.31	236.06	(45.73)	72.87
225,713	1,372.26	2,227.34	62.31	1,597.01	(224.76)	630.33
1,396,271	1,076.08	1,746.58	62.31	1,311.61	(235.53)	434.97
309,955	1,596.34	2,590.78	62.30	1,566.30	30.04	1,024.48
1,316,258	964.06	1,564.61	62.29	978.59	(14.53)	586.02
4,301	897.64	1,456.73	62.28	976.28	(78.64)	480.45
1,342,215	985.32	1,598.94	62.28	1,155.76	(170.44)	443.19
1,324,983	1,030.07	1,671.54	62.27	1,350.46	(320.39)	321.08
9,597	1,261.49	2,046.93	62.26	1,607.51	(346.02)	439.42
180,065	881.32	1,429.98	62.25	882.60	(1.28)	547.38
83,581	191.49	310.67	62.24	234.31	(42.83)	76.36
303,505	866.62	1,406.03	62.24	932.94	(66.32)	473.08
101,590	1,015.12	1,646.91	62.24	1,108.80	(93.67)	538.12
94,256	737.83	1,196.99	62.23	885.05	(147.22)	311.94
729,769	870.61	1,412.39	62.23	1,065.62	(195.01)	346.77
78,308	1,215.32	1,971.48	62.22	1,218.56	(3.24)	752.93
1,046,024	933.30	1,513.99	62.22	1,087.62	(154.33)	426.36
581,961	918.04	1,489.12	62.21	946.54	(28.51)	542.57
1,383,187	1,389.05	2,253.06	62.20	1,760.74	(371.69)	492.32
1,109,369	811.75	1,316.67	62.20	898.71	(86.96)	417.95
215,907	192.83	312.77	62.20	247.97	(55.14)	64.80
1,255,645	1,069.91	1,734.97	62.16	1,359.40	(289.49)	375.57
973,912	901.26	1,461.47	62.16	991.05	(89.80)	470.41
568,736	1,141.56	1,851.11	62.16	1,187.43	(45.87)	663.68
227,983	1,008.98	1,635.79	62.12	1,275.18	(266.21)	360.61
892,929	1,039.40	1,685.11	62.12	1,110.81	(71.40)	574.30
1,102,774	887.70	1,439.06	62.11	1,087.59	(199.89)	351.47
833,918	1,471.38	2,384.99	62.09	1,555.96	(84.58)	829.03
1,367,706	919.06	1,489.71	62.09	1,197.58	(278.52)	292.13
1,306,750	1,152.19	1,867.56	62.09	1,376.21	(224.03)	491.34
490,454	190.82	309.28	62.08	248.68	(57.87)	60.60
978,576	833.80	1,351.29	62.06	854.48	(20.68)	496.81
573,016	985.81	1,597.63	62.06	1,175.59	(189.77)	422.04
501,605	192.27	311.59	62.06	248.51	(56.24)	63.08
1,086,549	858.49	1,391.13	62.04	1,010.81	(152.32)	380.31

**Customers with 57% or Higher Increases Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
86,867	829.44	1,344.00	62.04	1,024.35	(194.91)	319.65
222,424	959.57	1,554.74	62.03	1,226.88	(267.31)	327.86
112,089	914.69	1,481.99	62.02	1,084.74	(170.05)	397.24
843,225	1,028.85	1,666.91	62.02	1,002.84	26.02	664.08
1,140,227	843.29	1,366.22	62.01	916.34	(73.05)	449.88
1,100,592	942.35	1,526.55	61.99	935.36	6.99	591.19
954,897	805.98	1,305.54	61.98	753.25	52.73	552.29
121,649	1,205.95	1,953.38	61.98	1,399.55	(193.59)	553.83
1,226,370	892.51	1,445.66	61.98	1,072.16	(179.65)	373.50
766,921	858.67	1,390.84	61.98	989.92	(131.25)	400.92
408,524	880.14	1,425.53	61.97	1,028.58	(148.44)	396.95
116,035	1,359.93	2,202.41	61.95	1,470.26	(110.33)	732.15
1,224,796	1,230.55	1,992.70	61.94	1,532.42	(301.87)	460.29
1,302,842	1,057.48	1,712.21	61.91	1,309.91	(252.43)	402.30
1,313,351	879.59	1,424.13	61.91	922.01	(42.43)	502.12
615,879	835.66	1,352.95	61.90	876.38	(40.72)	476.57
759,263	829.16	1,342.30	61.89	817.25	11.91	525.05
118,667	887.19	1,436.09	61.87	979.34	(92.15)	456.75
962,504	905.25	1,465.30	61.87	919.72	(14.47)	545.58
1,125,906	1,322.01	2,139.79	61.86	1,413.82	(91.81)	725.97
1,305,006	1,447.15	2,342.29	61.86	1,793.05	(345.91)	549.24
1,345,680	853.54	1,381.47	61.85	939.89	(86.36)	441.58
64,863	868.94	1,406.26	61.84	876.28	(7.35)	529.97
512,253	1,116.75	1,807.10	61.82	1,461.18	(344.43)	345.92
199,129	879.21	1,422.67	61.81	1,000.35	(121.14)	422.32
1,211,815	192.61	311.66	61.81	236.42	(43.82)	75.23
1,313,317	1,028.31	1,663.89	61.81	1,208.09	(179.78)	455.80
762,717	922.57	1,492.80	61.81	952.40	(29.83)	540.40
161,660	1,220.26	1,974.47	61.81	1,439.95	(219.69)	534.52
1,395,796	1,252.92	2,027.26	61.80	1,320.19	(67.26)	707.08
835,884	879.87	1,423.64	61.80	927.82	(47.95)	495.82
1,166,233	878.18	1,420.85	61.79	936.89	(58.71)	483.96
652,697	1,060.34	1,715.44	61.78	1,042.33	18.01	673.11
1,313,338	892.67	1,444.15	61.78	936.27	(43.60)	507.88
182,845	1,105.02	1,787.65	61.78	1,131.19	(26.18)	656.45
521,965	1,117.77	1,808.26	61.77	1,437.06	(319.29)	371.20
396,339	823.33	1,331.87	61.77	838.35	(15.03)	493.52
10,994	996.03	1,611.21	61.76	1,162.63	(166.60)	448.59
929,274	864.68	1,398.71	61.76	909.14	(44.46)	489.58
958,380	1,011.57	1,636.30	61.76	1,139.29	(127.72)	497.01
297,101	883.48	1,429.09	61.76	812.44	71.05	616.65
493,771	990.11	1,601.51	61.75	1,268.59	(278.48)	332.91
1,383,773	824.29	1,333.15	61.73	917.37	(93.08)	415.79
205,212	936.80	1,515.11	61.73	1,164.15	(227.35)	350.96
774,386	1,514.54	2,449.24	61.72	1,678.30	(163.76)	770.95
177,761	873.43	1,412.39	61.71	1,076.99	(203.56)	335.41
1,315,343	933.94	1,510.09	61.69	967.23	(33.29)	542.87
520,427	1,127.15	1,822.39	61.68	1,309.82	(182.67)	512.57
791,377	855.04	1,382.15	61.65	840.83	14.21	541.31

**Customers with 57% or Higher Increases Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
1,113,559	956.20	1,545.50	61.63	1,168.40	(212.20)	377.10
733,029	1,198.82	1,937.62	61.63	1,320.30	(121.47)	617.32
442,291	861.91	1,392.84	61.60	982.33	(120.42)	410.51
1,104,569	1,059.88	1,712.76	61.60	1,344.85	(284.96)	367.91
170,402	875.13	1,414.01	61.58	897.53	(22.40)	516.48
21,122	871.82	1,408.65	61.57	939.40	(67.58)	469.25
235,265	847.88	1,369.84	61.56	953.04	(105.16)	416.80
160,718	778.84	1,258.25	61.56	937.44	(158.61)	320.81
770,280	915.38	1,478.74	61.54	1,129.56	(214.18)	349.18
1,313,349	976.40	1,577.28	61.54	1,106.90	(130.51)	470.38
271,039	1,255.28	2,027.77	61.54	1,542.47	(287.19)	485.30
56,345	901.25	1,455.81	61.53	908.44	(7.19)	547.37
630,211	875.42	1,414.02	61.53	1,002.23	(126.81)	411.80
896,430	860.07	1,389.17	61.52	884.87	(24.80)	504.31
217,117	1,011.27	1,633.39	61.52	1,229.44	(218.18)	403.95
1,283,988	1,095.32	1,769.09	61.51	1,169.31	(73.98)	599.78
1,381,664	882.97	1,426.05	61.51	936.59	(53.62)	489.46
78,934	5,769.95	9,318.68	61.50	6,705.06	(935.11)	2,613.62
386,677	845.63	1,365.55	61.48	888.69	(43.06)	476.85
625,350	1,117.31	1,804.05	61.46	1,127.72	(10.41)	676.33
1,346,268	875.05	1,412.88	61.46	1,018.41	(143.36)	394.47
251,433	1,022.39	1,650.69	61.45	1,083.31	(60.93)	567.38
222,631	883.60	1,426.56	61.45	1,079.66	(196.05)	346.91
1,313,893	989.88	1,598.07	61.44	1,152.93	(163.05)	445.14
737,548	847.04	1,367.43	61.44	954.86	(107.83)	412.57
754,620	1,290.07	2,082.45	61.42	1,621.31	(331.24)	461.14
60,528	3,541.41	5,716.34	61.41	4,341.69	(800.28)	1,374.64
1,101,755	784.93	1,266.90	61.40	985.59	(200.67)	281.31
1,092,473	1,198.36	1,934.17	61.40	1,194.11	4.25	740.06
215,767	985.37	1,590.40	61.40	1,228.29	(242.92)	362.10
50,903	1,043.26	1,683.71	61.39	1,090.69	(47.42)	593.02
142,255	1,024.03	1,652.64	61.39	971.00	53.03	681.64
380,661	970.80	1,566.56	61.37	1,000.21	(29.41)	566.35
127,514	997.27	1,609.15	61.36	1,247.87	(250.60)	361.28
672,161	1,139.31	1,838.12	61.34	1,290.31	(151.00)	547.80
521,008	861.63	1,390.03	61.33	1,073.52	(211.89)	316.52
369,646	2,019.45	3,257.88	61.32	2,348.57	(329.12)	909.31
998,079	1,793.60	2,893.51	61.32	2,264.36	(470.77)	629.14
4,911	996.70	1,607.91	61.32	1,164.78	(168.08)	443.13
392,313	957.49	1,544.63	61.32	1,168.99	(211.50)	375.64
695,167	1,091.74	1,761.17	61.32	1,340.98	(249.24)	420.19
82,162	937.80	1,512.82	61.32	994.22	(56.42)	518.60
910,379	887.09	1,430.94	61.31	921.51	(34.42)	509.43
1,122,339	842.42	1,358.83	61.30	915.42	(73.00)	443.40
1,149,387	893.09	1,440.52	61.30	1,034.38	(141.30)	406.14
1,131,559	914.68	1,475.27	61.29	1,078.61	(163.93)	396.66
511,485	1,059.45	1,708.68	61.28	1,119.08	(59.64)	589.59
237,614	929.05	1,498.32	61.27	1,155.28	(226.23)	343.04
677,292	1,243.30	2,005.10	61.27	1,384.63	(141.34)	620.47

**Customers with 57% or Higher Increases Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
929,279	1,510.11	2,435.30	61.27	1,585.59	(75.47)	849.71
1,313,379	946.20	1,525.90	61.27	1,102.79	(156.59)	423.11
1,090,292	911.31	1,469.59	61.26	1,006.98	(95.67)	462.60
1,167,570	935.15	1,507.89	61.24	1,143.36	(208.21)	364.52
1,228,657	897.74	1,447.54	61.24	1,124.48	(226.74)	323.05
584,761	915.60	1,476.32	61.24	1,050.38	(134.77)	425.94
812,554	1,006.72	1,623.20	61.24	1,255.26	(248.54)	367.93
706,881	993.08	1,601.12	61.23	1,250.06	(256.99)	351.06
114,772	817.70	1,318.33	61.22	899.92	(82.22)	418.41
697,180	987.37	1,591.85	61.22	1,247.50	(260.13)	344.35
1,396,711	917.49	1,479.03	61.20	1,105.58	(188.09)	373.45
1,321,012	1,011.64	1,630.77	61.20	1,090.91	(79.27)	539.86
675,047	877.88	1,415.09	61.19	1,065.09	(187.21)	350.00
456,884	853.32	1,375.50	61.19	856.99	(3.68)	518.50
294,449	990.31	1,596.32	61.19	1,046.82	(56.51)	549.49
1,364,626	879.52	1,417.64	61.18	917.63	(38.12)	500.01
1,097,938	846.30	1,364.02	61.17	930.20	(83.90)	433.82
1,390,716	954.25	1,537.94	61.17	1,170.54	(216.29)	367.40
85,273	899.48	1,449.66	61.17	1,112.53	(213.05)	337.13
1,326,900	871.88	1,405.10	61.16	1,077.11	(205.23)	327.99
828,717	993.87	1,601.65	61.15	1,058.08	(64.21)	543.58
1,313,378	868.05	1,398.72	61.13	920.22	(52.17)	478.50
697,387	867.94	1,398.21	61.09	885.17	(17.22)	513.04
951,457	966.90	1,557.56	61.09	1,160.88	(193.99)	396.68
1,395,768	1,025.05	1,651.23	61.09	1,322.41	(297.36)	328.82
1,026,197	938.41	1,511.62	61.08	1,108.26	(169.85)	403.35
585,005	1,112.76	1,792.39	61.08	1,121.05	(8.30)	671.33
1,342,209	939.67	1,513.51	61.07	999.15	(59.48)	514.36
1,381,685	890.21	1,433.77	61.06	1,058.83	(168.63)	374.93
8,715	1,100.33	1,772.11	61.05	1,019.55	80.78	752.55
837,581	831.93	1,339.82	61.05	1,030.06	(198.14)	309.76
1,071,381	849.19	1,367.27	61.01	964.27	(115.08)	403.00
1,119,551	834.47	1,343.47	61.00	1,082.38	(247.91)	261.08
958,265	1,082.46	1,742.47	60.97	1,277.35	(194.89)	465.12
711,658	1,085.92	1,747.96	60.97	1,282.58	(196.66)	465.38
1,070,911	822.52	1,323.82	60.95	846.06	(23.54)	477.76
753,321	893.67	1,438.32	60.95	879.43	14.24	558.89
650,945	198.73	319.82	60.93	254.59	(55.86)	65.23
1,394,928	850.48	1,368.61	60.92	973.87	(123.39)	394.75
913,060	886.16	1,426.03	60.92	1,032.82	(146.66)	393.22
548,733	863.62	1,389.63	60.91	1,077.94	(214.32)	311.69
1,355,711	839.02	1,350.03	60.91	1,082.36	(243.33)	267.67
706,175	896.75	1,442.91	60.90	821.30	75.45	621.61
769,246	1,500.17	2,413.71	60.90	1,713.58	(213.41)	700.13
825,539	199.04	320.24	60.90	250.50	(51.47)	69.74
591,484	840.10	1,351.38	60.86	997.38	(157.29)	354.00
485,429	924.29	1,486.71	60.85	1,026.36	(102.07)	460.34
1,332,182	921.56	1,482.23	60.84	1,079.20	(157.64)	403.03
1,291,836	1,003.35	1,613.78	60.84	998.34	5.02	615.45

**Customers with 57% or Higher Increases Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
1,097,258	839.28	1,349.87	60.84	857.92	(18.64)	491.96
464,153	1,001.94	1,611.47	60.84	1,268.53	(266.59)	342.94
1,076,597	753.49	1,211.85	60.83	798.22	(44.73)	413.63
746,485	944.38	1,518.80	60.83	907.58	36.80	611.22
96,198	953.12	1,532.85	60.83	1,210.40	(257.28)	322.45
989,127	920.68	1,480.59	60.81	1,079.50	(158.82)	401.09
897,525	980.93	1,577.39	60.81	1,019.88	(38.95)	557.51
1,059,469	1,014.27	1,630.88	60.79	1,164.88	(150.61)	466.01
197,308	849.71	1,366.27	60.79	1,005.79	(156.08)	360.48
92,602	911.91	1,466.26	60.79	934.34	(22.43)	531.92
621,853	196.29	315.62	60.79	240.35	(44.06)	75.26
544,145	866.97	1,393.97	60.79	847.05	19.92	546.91
135,332	841.73	1,353.37	60.78	1,048.85	(207.12)	304.52
1,313,337	855.98	1,376.25	60.78	886.79	(30.81)	489.46
1,345,358	888.29	1,428.20	60.78	986.42	(98.13)	441.78
780,732	1,389.68	2,234.28	60.78	1,378.66	11.02	855.62
903,689	844.34	1,357.48	60.77	848.53	(4.19)	508.95
691,328	1,031.91	1,659.04	60.77	1,164.97	(133.05)	494.07
1,375,923	851.09	1,368.14	60.75	986.47	(135.37)	381.68
1,360,593	923.53	1,484.58	60.75	1,142.39	(218.85)	342.19
938,310	858.51	1,380.04	60.75	1,021.74	(163.23)	358.30
473,578	961.63	1,545.75	60.74	867.20	94.44	678.55
643,160	990.78	1,592.56	60.74	1,087.52	(96.73)	505.05
327,917	911.05	1,464.38	60.74	1,039.02	(127.97)	425.36
708,313	898.48	1,444.14	60.73	1,005.54	(107.06)	438.60
196,711	835.94	1,343.58	60.73	929.67	(93.74)	413.90
56,593	945.15	1,519.04	60.72	1,176.27	(231.11)	342.78
174,958	951.11	1,528.61	60.72	1,156.05	(204.93)	372.57
384,615	972.97	1,563.68	60.71	979.49	(6.52)	584.18
189,349	995.81	1,600.35	60.71	1,034.57	(38.76)	565.79
653,110	1,046.98	1,682.53	60.70	918.60	128.38	763.93
42,066	827.75	1,330.22	60.70	797.11	30.63	533.11
296,402	1,070.50	1,720.29	60.70	1,280.42	(209.92)	439.87
649,631	834.08	1,340.36	60.70	958.26	(124.18)	382.10
34,935	819.26	1,316.53	60.70	873.00	(53.75)	443.53
1,137,349	1,089.78	1,751.22	60.69	1,175.51	(85.73)	575.71
493,281	950.54	1,527.39	60.69	1,039.05	(88.51)	488.34
21,991	875.26	1,406.38	60.68	1,115.57	(240.32)	290.80
780,118	984.22	1,581.43	60.68	1,075.49	(91.28)	505.94
1,300,585	997.74	1,602.99	60.66	948.51	49.23	654.48
490,616	894.42	1,436.94	60.66	896.64	(2.22)	540.30
1,390,788	890.87	1,431.04	60.63	1,005.86	(114.98)	425.18
1,142,008	843.54	1,354.99	60.63	1,006.48	(162.95)	348.51
1,393,937	931.21	1,495.64	60.61	1,063.55	(132.34)	432.10
429,804	1,012.50	1,626.19	60.61	1,096.94	(84.44)	529.25
1,345,021	939.61	1,509.08	60.61	1,020.00	(80.39)	489.08
375,438	896.65	1,440.04	60.60	1,001.83	(105.18)	438.21
600,593	938.01	1,506.38	60.59	974.41	(36.41)	531.97
770,962	940.24	1,509.88	60.58	1,014.29	(74.05)	495.59



**Customers with 57% or Higher Increases Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
1,389,043	978.46	1,571.24	60.58	1,030.32	(51.86)	540.92
343,662	788.39	1,265.92	60.57	918.40	(130.01)	347.52
454,138	982.52	1,577.32	60.54	1,246.48	(263.95)	330.84
1,144,924	931.36	1,495.14	60.53	926.49	4.86	568.64
48,183	1,484.04	2,382.32	60.53	1,697.93	(213.89)	684.40
1,118,569	941.38	1,511.19	60.53	1,149.73	(208.36)	361.45
1,410,313	915.14	1,469.00	60.52	1,173.74	(258.59)	295.27
209,718	967.83	1,553.34	60.50	1,140.84	(173.01)	412.50
612,345	830.78	1,333.37	60.50	954.34	(123.57)	379.03
574,942	197.60	317.15	60.50	256.60	(59.00)	60.54
1,139,254	1,037.27	1,664.76	60.49	1,090.86	(53.59)	573.90
706,094	952.21	1,528.20	60.49	979.09	(26.88)	549.11
907,028	946.94	1,519.45	60.46	984.13	(37.18)	535.33
811,895	864.16	1,386.57	60.45	1,105.29	(241.12)	281.28
1,142,875	884.14	1,418.52	60.44	953.81	(69.67)	464.70
839,974	907.83	1,456.47	60.43	944.12	(36.29)	512.35
936,082	893.43	1,433.34	60.43	1,150.78	(257.35)	282.56
618,642	904.38	1,450.80	60.42	1,166.13	(261.75)	284.66
804,552	1,194.74	1,916.53	60.41	1,554.47	(359.73)	362.06
772,986	971.10	1,557.76	60.41	1,138.96	(167.86)	418.81
8,677	1,001.35	1,606.25	60.41	901.25	100.10	705.00
186,680	1,031.09	1,653.87	60.40	1,288.95	(257.86)	364.92
195,882	957.94	1,536.50	60.40	977.18	(19.25)	559.32
1,038,410	1,427.03	2,288.88	60.39	1,667.47	(240.45)	621.40
729,854	1,038.15	1,664.91	60.37	1,344.36	(306.21)	320.55
1,197,209	815.12	1,307.15	60.36	841.49	(26.38)	465.65
618,267	1,015.42	1,628.29	60.36	1,108.07	(92.65)	520.22
82,147	854.39	1,370.06	60.35	896.77	(42.38)	473.28
796,015	1,043.62	1,673.36	60.34	1,040.19	3.43	633.17
1,321,304	1,035.88	1,660.94	60.34	954.30	81.58	706.64
1,108,860	918.98	1,473.38	60.33	1,031.41	(112.43)	441.96
943,435	993.85	1,593.39	60.33	1,107.27	(113.42)	486.12
819,365	913.57	1,464.58	60.31	926.03	(12.46)	538.55
1,188,151	737.92	1,182.98	60.31	940.13	(202.20)	242.85
1,072,726	1,138.96	1,825.79	60.30	1,301.55	(162.59)	524.24
308,353	961.44	1,541.20	60.30	1,078.01	(116.57)	463.19
951,593	989.40	1,585.99	60.30	1,093.72	(104.32)	492.27
605,073	826.35	1,324.53	60.29	941.32	(114.98)	383.20
305,713	924.44	1,481.75	60.29	1,144.19	(219.75)	337.56
1,391,996	862.95	1,383.07	60.27	1,107.78	(244.84)	275.29
595,178	858.86	1,376.46	60.27	891.16	(32.30)	485.30
577,799	799.29	1,280.94	60.26	908.14	(108.85)	372.80
947,192	917.45	1,470.15	60.24	1,123.67	(206.22)	346.48
1,033,096	1,872.44	3,000.44	60.24	2,154.95	(282.51)	845.49
157,189	958.95	1,536.60	60.24	1,105.25	(146.30)	431.35
1,096,966	1,694.63	2,715.26	60.23	1,780.71	(86.08)	934.55
1,324,535	937.53	1,502.14	60.22	1,133.88	(196.36)	368.25
511,843	958.53	1,535.72	60.22	1,215.19	(256.66)	320.53
216,741	856.38	1,372.01	60.21	853.66	2.72	518.35



**Customers with 57% or Higher Increases Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
952,607	803.73	1,287.63	60.21	866.32	(62.59)	421.31
1,069,257	818.22	1,310.79	60.20	810.60	7.62	500.19
1,222,434	952.19	1,525.34	60.19	984.17	(31.98)	541.17
741,187	1,317.73	2,110.77	60.18	1,544.29	(226.56)	566.48
185,245	917.59	1,469.80	60.18	1,071.16	(153.57)	398.64
1,379,685	1,237.93	1,982.87	60.18	1,383.15	(145.22)	599.72
1,011,850	836.05	1,339.16	60.18	968.61	(132.56)	370.54
573,206	877.61	1,405.65	60.17	1,039.53	(161.91)	366.12
962,141	199.18	319.00	60.15	253.69	(54.51)	65.30
1,101,625	789.46	1,264.32	60.15	934.94	(145.48)	329.38
1,244,060	1,367.82	2,190.37	60.14	1,542.53	(174.71)	647.84
235,846	867.28	1,388.71	60.12	1,099.37	(232.09)	289.34
1,342,213	942.75	1,509.55	60.12	1,145.32	(202.56)	364.23
1,318,656	869.07	1,391.52	60.12	874.29	(5.21)	517.24
567,027	824.96	1,320.83	60.11	938.94	(113.99)	381.89
1,310,827	943.77	1,511.05	60.11	1,005.20	(61.43)	505.85
139,247	935.28	1,497.44	60.11	1,141.32	(206.04)	356.11
654,135	981.09	1,570.75	60.10	957.03	24.06	613.72
632,160	1,010.02	1,617.06	60.10	1,268.45	(258.42)	348.62
861,845	857.85	1,373.40	60.10	977.71	(119.86)	395.69
409,215	1,107.15	1,772.49	60.09	1,216.52	(109.37)	555.97
385,137	1,237.63	1,981.38	60.09	1,222.76	14.87	758.61
543,670	196.86	315.15	60.09	255.09	(58.24)	60.06
498,186	1,142.06	1,828.31	60.09	1,165.29	(23.23)	663.02
794,060	882.70	1,413.05	60.08	1,093.53	(210.83)	319.52
242,798	838.30	1,341.83	60.06	886.21	(47.91)	455.62
913,085	850.61	1,361.51	60.06	914.20	(63.59)	447.31
1,289,528	913.69	1,462.31	60.04	1,179.61	(265.93)	282.70
1,120,187	872.82	1,396.87	60.04	837.84	34.97	559.03
28,343	946.62	1,514.93	60.04	1,006.29	(59.67)	508.64
409,091	991.71	1,587.07	60.03	1,198.63	(206.91)	388.44
1,012,663	902.93	1,444.87	60.02	1,106.38	(203.45)	338.49
518,443	820.10	1,312.30	60.02	992.32	(172.22)	319.98
1,281,605	962.16	1,539.59	60.01	1,123.91	(161.75)	415.68
40,072	887.06	1,419.40	60.01	939.74	(52.68)	479.65
281,053	972.75	1,556.45	60.01	1,090.51	(117.77)	465.94
890,988	839.20	1,342.75	60.00	795.76	43.44	546.99
80,972	860.92	1,377.41	59.99	935.06	(74.14)	442.35
102,270	1,052.42	1,683.73	59.99	1,083.34	(30.92)	600.40
782,839	1,031.92	1,650.89	59.98	1,298.21	(266.29)	352.68
220,058	936.60	1,498.27	59.97	868.27	68.33	630.00
1,024,807	841.37	1,345.91	59.97	1,017.01	(175.65)	328.89
9,476	1,009.09	1,614.08	59.95	1,111.43	(102.34)	502.66
475,270	879.26	1,406.38	59.95	1,050.87	(171.61)	355.51
612,512	948.12	1,516.46	59.94	1,057.00	(108.88)	459.46
724,781	1,163.13	1,860.16	59.93	1,355.98	(192.84)	504.19
242,695	827.27	1,323.02	59.93	967.33	(140.06)	355.69
3,192	868.70	1,389.24	59.92	1,108.40	(239.71)	280.84
232,668	847.99	1,356.09	59.92	1,052.00	(204.00)	304.09

**Customers with 57% or Higher Increases Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
1,067,920	200.13	320.04	59.91	240.36	(40.23)	79.67
67,706	903.26	1,444.40	59.91	1,050.13	(146.88)	394.27
1,273,259	849.91	1,359.05	59.91	1,042.15	(192.24)	316.90
1,186,893	982.08	1,570.31	59.90	946.29	35.79	624.03
624,559	974.59	1,558.08	59.87	1,240.91	(266.32)	317.16
788,071	203.11	324.70	59.87	262.56	(59.45)	62.15
185,299	853.17	1,363.95	59.87	930.54	(77.37)	433.41
1,237,085	927.19	1,482.23	59.86	1,113.94	(186.75)	368.30
214,013	2,300.65	3,677.86	59.86	2,892.59	(591.94)	785.28
933,392	928.19	1,483.68	59.85	1,049.64	(121.46)	434.04
615,827	966.64	1,545.01	59.83	1,230.84	(264.20)	314.17
571,355	901.15	1,440.32	59.83	965.22	(64.07)	475.10
799,369	893.69	1,428.37	59.83	1,002.71	(109.02)	425.67
472,724	904.13	1,444.96	59.82	981.94	(77.82)	463.02
1,360,085	1,093.29	1,747.15	59.81	1,273.69	(180.40)	473.47
348,610	1,338.12	2,138.41	59.81	1,493.03	(154.91)	645.38
800,262	816.82	1,305.32	59.81	917.09	(100.28)	388.22
1,313,325	1,079.67	1,725.36	59.80	1,019.42	60.26	705.94
266,348	1,024.48	1,636.98	59.79	1,155.14	(130.67)	481.84
411,655	956.53	1,528.23	59.77	1,219.66	(263.13)	308.57
277,061	834.88	1,333.85	59.77	1,011.35	(176.48)	322.49
518,033	872.09	1,393.16	59.75	1,040.23	(168.14)	352.93
1,070,349	1,130.42	1,805.78	59.74	1,371.08	(240.66)	434.70
331,880	927.51	1,481.58	59.74	937.84	(10.32)	543.75
536,039	966.13	1,543.28	59.74	923.90	42.24	619.38
1,015,282	875.96	1,399.23	59.74	996.25	(120.29)	402.98
548,822	971.20	1,551.37	59.74	1,047.71	(76.51)	503.66
742,140	901.43	1,439.78	59.72	997.03	(95.60)	442.74
904,516	951.22	1,519.27	59.72	1,145.55	(194.33)	373.72
754,961	892.67	1,425.70	59.71	963.07	(70.41)	462.62
193,170	200.37	320.02	59.71	251.26	(50.89)	68.76
1,383,540	865.67	1,382.42	59.69	1,015.47	(149.80)	366.94
642,504	920.10	1,469.32	59.69	956.72	(36.63)	512.60
1,227,480	960.35	1,533.59	59.69	988.93	(28.58)	544.65
1,348,093	825.06	1,317.37	59.67	959.93	(134.88)	357.43
347,738	201.01	320.94	59.66	254.85	(53.84)	66.08
1,186,161	834.90	1,332.99	59.66	934.65	(99.75)	398.34
1,213,128	910.73	1,454.02	59.65	1,156.75	(246.02)	297.27
1,242,073	860.46	1,373.71	59.65	893.36	(32.90)	480.35
462,539	1,023.59	1,634.13	59.65	1,128.29	(104.71)	505.84
1,333,820	951.42	1,518.78	59.63	1,231.39	(279.97)	287.39
701,735	1,082.52	1,728.02	59.63	1,291.95	(209.43)	436.07
925,864	1,060.76	1,693.03	59.61	1,269.30	(208.54)	423.73
64,566	876.68	1,399.22	59.60	1,035.65	(158.97)	363.57
1,346,003	1,069.00	1,706.18	59.60	1,355.44	(286.44)	350.73
1,093,362	935.56	1,493.15	59.60	1,191.06	(255.50)	302.10
89,880	899.75	1,435.99	59.60	918.37	(18.63)	517.61
1,319,600	956.24	1,526.14	59.60	1,000.00	(43.76)	526.14
1,094,783	200.68	320.28	59.60	258.30	(57.62)	61.97

**Customers with 57% or Higher Increases Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
1,313,335	837.47	1,336.52	59.59	881.72	(44.26)	454.80
598,305	875.87	1,397.74	59.58	974.53	(98.65)	423.21
269,408	874.16	1,394.81	59.56	966.87	(92.71)	427.93
1,224,392	1,545.80	2,466.19	59.54	1,565.77	(19.97)	900.42
611,925	201.57	321.59	59.54	248.28	(46.71)	73.31
580,727	906.56	1,446.25	59.53	1,154.38	(247.82)	291.88
582,326	870.31	1,388.37	59.53	930.44	(60.13)	457.94
341,463	861.90	1,374.84	59.51	957.97	(96.07)	416.87
455,837	906.12	1,445.34	59.51	1,049.64	(143.52)	395.70
380,199	1,012.66	1,615.06	59.49	1,065.89	(53.23)	549.17
663,429	954.28	1,521.93	59.48	846.37	107.91	675.56
870,126	948.64	1,512.82	59.47	1,092.90	(144.27)	419.92
123,919	1,116.12	1,779.79	59.46	1,216.47	(100.34)	563.32
920,549	857.09	1,366.68	59.46	1,092.44	(235.35)	274.24
489,149	921.89	1,469.94	59.45	1,067.02	(145.13)	402.92
412,701	202.14	322.27	59.43	241.73	(39.59)	80.53
638,214	942.97	1,503.31	59.42	1,090.41	(147.44)	412.90
695,627	859.00	1,369.40	59.42	1,093.29	(234.29)	276.12
176,805	848.62	1,352.86	59.42	1,056.26	(207.64)	296.60
623,054	1,179.92	1,881.00	59.42	1,431.88	(251.96)	449.11
268,766	824.03	1,313.58	59.41	904.06	(80.03)	409.52
291,736	203.34	324.14	59.41	262.51	(59.17)	61.63
903,031	861.15	1,372.72	59.41	953.36	(92.21)	419.36
473,682	822.53	1,311.11	59.40	903.46	(80.93)	407.65
649,712	955.38	1,522.87	59.40	1,110.96	(155.58)	411.91
84,929	828.29	1,320.20	59.39	996.95	(168.66)	323.25
666,922	895.75	1,427.70	59.39	992.17	(96.42)	435.53
842,059	831.01	1,324.39	59.37	812.49	18.51	511.90
1,350,285	1,146.40	1,826.95	59.36	1,252.17	(105.77)	574.78
1,215,606	1,025.60	1,634.37	59.36	1,297.72	(272.12)	336.66
394,682	1,978.31	3,152.50	59.35	2,386.20	(407.89)	766.31
101,523	987.48	1,573.57	59.35	1,138.02	(150.53)	435.55
324,349	825.86	1,316.00	59.35	935.56	(109.71)	380.44
36,196	830.52	1,323.27	59.33	1,071.30	(240.78)	251.97
378,778	900.83	1,435.30	59.33	1,082.30	(181.46)	353.00
694,709	1,057.38	1,684.54	59.31	1,157.33	(99.95)	527.21
43,408	835.36	1,330.75	59.30	874.80	(39.44)	455.94
1,334,511	971.23	1,547.18	59.30	1,201.00	(229.77)	346.19
593,514	951.05	1,514.99	59.30	1,147.50	(196.45)	367.49
973,796	980.16	1,561.20	59.28	1,181.31	(201.15)	379.89
246,571	814.64	1,297.56	59.28	815.68	(1.04)	481.87
1,058,896	955.89	1,522.54	59.28	893.93	61.96	628.61
691,545	928.89	1,479.48	59.27	1,044.35	(115.47)	435.13
309,313	1,485.69	2,366.28	59.27	1,860.36	(374.68)	505.92
1,358,609	854.13	1,360.37	59.27	1,040.13	(186.00)	320.24
4,927	1,142.14	1,819.06	59.27	1,111.21	30.92	707.85
1,082,793	890.20	1,417.79	59.27	1,016.34	(126.14)	401.46
280,197	202.54	322.56	59.26	243.07	(40.54)	79.48
1,084,062	898.99	1,431.71	59.26	1,066.18	(167.18)	365.53

**Customers with 57% or Higher Increases Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
384,984	1,044.06	1,662.69	59.25	1,141.77	(97.72)	520.91
861,782	1,057.65	1,684.28	59.25	1,126.68	(69.03)	557.60
1,171,637	979.97	1,560.54	59.24	1,062.17	(82.21)	498.37
996,807	875.46	1,394.12	59.24	1,113.90	(238.44)	280.22
489,018	1,032.99	1,644.75	59.22	1,140.39	(107.40)	504.35
452,411	1,121.48	1,785.60	59.22	1,255.16	(133.68)	530.44
1,018,940	1,104.92	1,759.18	59.21	1,254.48	(149.55)	504.71
403,274	911.55	1,451.26	59.21	1,104.68	(193.13)	346.58
1,225,465	889.74	1,416.48	59.20	937.73	(47.99)	478.75
444,144	938.91	1,494.75	59.20	977.43	(38.52)	517.32
66,809	944.21	1,503.15	59.20	1,204.45	(260.24)	298.70
881,556	920.03	1,464.64	59.19	1,065.65	(145.62)	398.99
1,156,195	929.19	1,479.19	59.19	1,016.78	(87.59)	462.41
1,269,545	959.71	1,527.71	59.19	1,032.24	(72.53)	495.47
1,383,774	942.75	1,500.63	59.17	981.92	(39.17)	518.70
999,882	874.31	1,391.64	59.17	947.33	(73.02)	444.31
900,368	936.50	1,490.49	59.16	1,000.55	(64.06)	489.93
550,628	2,232.18	3,552.60	59.15	2,783.12	(550.94)	769.47
643,470	894.98	1,424.35	59.15	1,041.41	(146.43)	382.94
895,814	832.91	1,325.53	59.14	850.75	(17.84)	474.78
1,313,290	1,047.84	1,667.55	59.14	986.18	61.67	681.37
1,159,823	853.71	1,358.56	59.14	935.97	(82.26)	422.59
1,400,079	872.09	1,387.77	59.13	1,095.84	(223.75)	291.92
1,345,757	859.41	1,367.56	59.13	939.63	(80.22)	427.93
36,159	875.32	1,392.87	59.13	1,064.51	(189.19)	328.36
991,553	913.64	1,453.77	59.12	1,014.50	(100.87)	439.26
117,336	1,073.83	1,708.56	59.11	1,222.43	(148.60)	486.13
356,341	848.93	1,350.70	59.11	930.06	(81.13)	420.64
880,068	874.10	1,390.66	59.10	871.53	2.57	519.12
1,258	809.44	1,287.78	59.10	905.91	(96.48)	381.87
1,327,519	947.44	1,507.26	59.09	954.35	(6.91)	552.91
809,399	983.21	1,564.01	59.07	1,176.58	(193.37)	387.42
196,994	884.46	1,406.92	59.07	1,023.97	(139.51)	382.95
391,016	992.36	1,578.41	59.06	1,132.17	(139.82)	446.24
808,974	206.44	328.35	59.05	260.10	(53.66)	68.25
1,173,442	1,357.34	2,158.83	59.05	1,540.37	(183.03)	618.46
158,964	1,229.69	1,955.74	59.04	1,584.15	(354.46)	371.59
1,320,769	870.34	1,384.09	59.03	1,095.59	(225.25)	288.50
1,342,456	1,030.60	1,638.94	59.03	1,180.02	(149.41)	458.93
899,549	942.73	1,499.20	59.03	1,204.33	(261.60)	294.87
1,199,597	874.37	1,390.48	59.03	1,005.17	(130.79)	385.31
1,321,279	915.28	1,455.41	59.01	1,084.28	(169.00)	371.13
7,977	1,149.89	1,828.45	59.01	1,308.98	(159.08)	519.47
153,371	982.93	1,562.92	59.01	1,096.15	(113.22)	466.78
1,082,553	982.84	1,562.78	59.01	998.21	(15.37)	564.56
597,584	808.28	1,285.09	58.99	904.48	(96.20)	380.61
655,074	905.24	1,439.22	58.99	1,011.14	(105.89)	428.08
677,407	1,164.19	1,850.87	58.98	1,257.35	(93.17)	593.52
547,430	860.92	1,368.67	58.98	1,088.76	(227.84)	279.91

**Customers with 57% or Higher Increases Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
187,983	1,676.57	2,665.06	58.96	1,949.70	(273.13)	715.36
493,037	855.85	1,360.42	58.95	1,005.76	(149.91)	354.66
1,100,960	912.76	1,450.83	58.95	1,149.89	(237.12)	300.95
1,057,363	867.93	1,379.29	58.92	1,117.00	(249.07)	262.29
883,083	829.52	1,318.24	58.92	822.40	7.12	495.85
441,764	873.72	1,388.46	58.91	866.85	6.86	521.61
1,156,251	1,194.20	1,897.66	58.91	1,211.12	(16.92)	686.54
951,267	205.18	326.04	58.90	258.88	(53.70)	67.16
726,539	994.44	1,580.16	58.90	1,029.62	(35.18)	550.54
751,439	879.65	1,397.75	58.90	968.95	(89.30)	428.81
255,434	868.16	1,379.48	58.90	834.73	33.43	544.75
1,124,955	1,205.42	1,915.31	58.89	1,293.41	(87.98)	621.91
313,631	807.89	1,283.65	58.89	975.25	(167.36)	308.40
951,110	1,353.90	2,151.06	58.88	1,415.14	(61.24)	735.92
268,051	949.66	1,508.77	58.88	1,130.01	(180.35)	378.77
970,378	933.85	1,483.56	58.87	1,155.53	(221.68)	328.03
313,558	851.16	1,352.15	58.86	1,062.93	(211.77)	289.22
1,043,524	909.92	1,445.46	58.86	1,135.22	(225.30)	310.24
1,337,015	1,007.25	1,600.03	58.85	1,084.60	(77.35)	515.42
1,303,988	793.90	1,261.06	58.84	757.72	36.18	503.34
93,837	957.57	1,520.83	58.82	1,136.69	(179.12)	384.15
1,405,320	826.11	1,312.05	58.82	957.63	(131.52)	354.42
1,316,246	1,004.11	1,594.69	58.82	967.91	36.19	626.78
1,259,771	204.76	325.19	58.81	253.83	(49.07)	71.36
1,033,690	956.66	1,519.29	58.81	1,091.37	(134.71)	427.92
980,324	825.74	1,311.35	58.81	815.66	10.08	495.69
324,632	204.80	325.22	58.80	257.15	(52.35)	68.07
309,129	943.44	1,498.19	58.80	923.24	20.20	574.95
874,731	1,119.59	1,777.89	58.80	1,276.79	(157.20)	501.09
1,057,371	1,061.29	1,685.26	58.79	1,157.85	(96.55)	527.41
593,292	892.27	1,416.84	58.79	1,002.15	(109.89)	414.69
349,431	836.67	1,328.53	58.79	972.46	(135.79)	356.08
44,999	983.62	1,561.73	58.77	971.64	11.98	590.09
195,849	980.96	1,557.51	58.77	1,209.06	(228.10)	348.44
409,012	802.00	1,273.29	58.76	818.21	(16.20)	455.09
243,612	866.63	1,375.89	58.76	993.79	(127.16)	382.10
840,245	861.32	1,367.45	58.76	934.04	(72.71)	433.41
347,269	1,003.46	1,593.10	58.76	1,195.00	(191.54)	398.10
181,219	206.46	327.78	58.76	259.49	(53.03)	68.29
42,470	963.60	1,529.70	58.75	1,114.77	(151.17)	414.94
791,355	920.64	1,461.49	58.75	1,130.61	(209.97)	330.89
1,264,787	811.31	1,287.94	58.75	961.05	(149.74)	326.89
1,105,489	852.84	1,353.85	58.75	965.12	(112.28)	388.73
218,254	980.47	1,556.33	58.73	1,161.57	(181.09)	394.77
681,232	1,935.77	3,072.71	58.73	2,457.60	(521.83)	615.11
1,271,681	1,532.38	2,432.28	58.73	1,524.95	7.43	907.33
1,162,493	818.65	1,299.38	58.72	989.90	(171.25)	309.48
70,324	903.47	1,433.98	58.72	1,166.76	(263.29)	267.23
127,162	902.75	1,432.84	58.72	1,100.45	(197.70)	332.38



**Customers with 57% or Higher Increases Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
72,680	922.28	1,463.79	58.71	1,102.99	(180.71)	360.80
441,743	771.58	1,224.49	58.70	837.44	(65.85)	387.05
1,337,027	927.07	1,471.23	58.70	1,035.62	(108.55)	435.61
1,325,437	867.29	1,376.34	58.69	924.39	(57.10)	451.95
866,441	930.81	1,477.03	58.68	1,125.14	(194.34)	351.89
1,185,843	831.01	1,318.63	58.68	868.76	(37.76)	449.87
1,349,940	890.71	1,413.32	58.67	975.44	(84.73)	437.87
1,092,041	862.61	1,368.73	58.67	917.98	(55.37)	450.75
452,371	813.35	1,290.51	58.67	993.19	(179.85)	297.32
663,024	849.45	1,347.79	58.67	930.40	(80.95)	417.39
302,909	900.58	1,428.91	58.67	1,010.84	(110.26)	418.07
1,371,522	887.71	1,408.34	58.65	904.93	(17.22)	503.41
528,252	910.63	1,444.66	58.65	1,030.17	(119.54)	414.49
74,062	883.31	1,401.25	58.64	1,119.40	(236.09)	281.84
561,373	827.91	1,313.36	58.64	844.14	(16.23)	469.22
1,345,135	927.62	1,471.51	58.63	1,118.04	(190.42)	353.46
1,113,593	1,137.51	1,804.40	58.63	1,263.17	(125.66)	541.23
172,313	1,011.46	1,604.45	58.63	966.63	44.83	637.82
897,689	872.74	1,384.40	58.63	1,022.86	(150.12)	361.53
490,467	877.03	1,391.08	58.61	865.82	11.21	525.26
797,766	912.66	1,447.56	58.61	1,161.28	(248.62)	286.28
576,900	1,168.74	1,853.59	58.60	1,480.21	(311.47)	373.37
130,013	811.72	1,287.34	58.59	824.64	(12.92)	462.69
410,808	1,111.69	1,763.04	58.59	1,147.70	(36.01)	615.34
538,687	831.71	1,318.99	58.59	965.94	(134.23)	353.05
436,966	915.50	1,451.83	58.58	1,168.75	(253.26)	283.08
1,313,324	846.73	1,342.76	58.58	959.85	(113.12)	382.91
1,027,071	895.02	1,419.31	58.58	970.77	(75.75)	448.53
622,751	981.16	1,555.87	58.57	1,196.46	(215.30)	359.41
1,321,298	995.24	1,578.17	58.57	931.79	63.46	646.38
50,742	879.12	1,394.02	58.57	1,083.75	(204.62)	310.27
527,201	855.83	1,357.04	58.57	1,100.25	(244.42)	256.80
1,361,187	1,090.57	1,729.22	58.56	1,149.69	(59.12)	579.53
206,980	206.31	327.12	58.56	266.09	(59.78)	61.03
278,545	795.92	1,261.97	58.56	824.78	(28.86)	437.20
680,745	952.85	1,510.78	58.55	1,201.35	(248.50)	309.43
989,113	882.22	1,398.74	58.55	1,009.17	(126.96)	389.56
68,265	993.44	1,575.07	58.55	1,035.22	(41.78)	539.85
1,350,046	893.42	1,416.44	58.54	1,044.20	(150.78)	372.24
546,830	908.77	1,440.73	58.54	1,126.33	(217.56)	314.39
1,373,565	899.82	1,426.51	58.53	1,153.79	(253.98)	272.72
715,918	897.05	1,422.11	58.53	966.24	(69.19)	455.87
1,281,612	1,014.43	1,608.21	58.53	1,187.15	(172.71)	421.06
81,033	825.82	1,309.01	58.51	798.44	27.37	510.57
323,325	1,043.52	1,654.10	58.51	1,147.39	(103.86)	506.71
279,776	1,303.92	2,066.69	58.50	1,442.61	(138.69)	624.08
182,044	890.10	1,410.77	58.49	1,070.94	(180.83)	339.83
1,178,427	1,368.49	2,168.96	58.49	1,504.89	(136.40)	664.07
191,077	1,484.70	2,353.15	58.49	1,548.33	(63.63)	804.82



**Customers with 57% or Higher Increases Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
960,720	897.28	1,422.12	58.49	1,061.77	(164.49)	360.35
1,082,626	801.43	1,270.13	58.48	870.53	(69.11)	399.60
967,820	965.86	1,530.72	58.48	1,073.34	(107.49)	457.38
904,283	990.33	1,569.42	58.47	1,139.93	(149.61)	429.48
180,968	904.18	1,432.87	58.47	960.28	(56.09)	472.60
117,054	1,951.22	3,091.87	58.46	2,205.49	(254.27)	886.38
876,659	832.40	1,318.99	58.46	929.33	(96.93)	389.66
224,089	1,158.16	1,835.12	58.45	1,444.29	(286.13)	390.83
222,874	813.72	1,289.35	58.45	805.22	8.50	484.13
799,323	873.45	1,383.93	58.44	994.94	(121.49)	388.98
153,825	1,502.18	2,379.99	58.44	1,657.52	(155.34)	722.48
143,305	852.54	1,350.65	58.43	1,055.01	(202.46)	295.65
414,829	1,048.33	1,660.71	58.42	1,228.78	(180.46)	431.93
1,287,750	892.52	1,413.78	58.40	1,040.46	(147.94)	373.31
1,266,953	996.77	1,578.87	58.40	1,198.43	(201.66)	380.44
1,110,206	1,186.62	1,879.55	58.39	1,244.74	(58.12)	634.81
679,324	826.00	1,308.32	58.39	923.76	(97.76)	384.56
1,344,064	1,022.49	1,619.53	58.39	1,047.50	(25.00)	572.03
1,313,326	962.08	1,523.82	58.39	975.31	(13.23)	548.51
1,004,662	1,026.29	1,625.47	58.38	1,001.64	24.66	623.83
295,469	877.35	1,389.57	58.38	902.95	(25.60)	486.62
848,746	918.42	1,454.56	58.38	1,068.84	(150.42)	385.72
539,813	206.27	326.68	58.38	247.80	(41.53)	78.88
1,222,696	860.38	1,362.61	58.37	972.53	(112.14)	390.08
21,031	1,029.35	1,630.18	58.37	1,031.71	(2.36)	598.46
796,466	974.63	1,543.29	58.35	911.96	62.67	631.33
15,391	1,021.00	1,616.51	58.33	1,225.35	(204.35)	391.16
267,694	974.69	1,543.16	58.32	1,036.99	(62.30)	506.17
740,399	205.06	324.64	58.32	249.69	(44.63)	74.95
452,693	894.24	1,415.69	58.31	1,147.50	(253.26)	268.19
173,589	882.48	1,397.05	58.31	1,031.46	(148.98)	365.60
171,879	818.49	1,295.73	58.31	1,005.43	(186.94)	290.30
115,924	1,397.60	2,212.42	58.30	1,495.39	(97.79)	717.02
298,630	952.93	1,508.44	58.30	1,216.31	(263.39)	292.13
872,764	904.96	1,432.50	58.29	1,096.25	(191.29)	336.25
620,184	962.91	1,524.09	58.28	1,026.76	(63.85)	497.33
84,613	1,193.00	1,888.26	58.28	1,443.49	(250.49)	444.77
368,838	937.68	1,484.06	58.27	1,174.73	(237.06)	309.33
344,410	812.38	1,285.73	58.27	788.40	23.98	497.33
74,313	961.72	1,522.05	58.26	998.04	(36.32)	524.01
1,272,318	867.59	1,373.02	58.26	1,098.54	(230.95)	274.48
989,561	1,531.61	2,423.84	58.25	1,772.22	(240.61)	651.63
358,193	993.31	1,571.90	58.25	1,215.81	(222.50)	356.10
66,499	887.22	1,404.02	58.25	1,022.66	(135.44)	381.36
611,649	1,250.66	1,979.13	58.25	1,512.62	(261.95)	466.51
591,578	916.47	1,450.16	58.23	1,060.81	(144.34)	389.35
1,344,066	858.41	1,358.26	58.23	1,040.21	(181.80)	318.05
16,424	1,083.29	1,714.08	58.23	989.16	94.12	724.91
1,021,268	863.45	1,366.21	58.23	1,009.56	(146.11)	356.65

**Customers with 57% or Higher Increases Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
1,358,962	1,311.00	2,074.21	58.22	1,635.45	(324.44)	438.76
912,935	1,014.36	1,604.85	58.21	1,225.28	(210.92)	379.57
187,430	945.78	1,496.33	58.21	965.92	(20.14)	530.41
1,128,662	1,353.50	2,141.36	58.21	1,352.27	1.23	789.09
738,613	1,660.17	2,626.24	58.19	2,100.73	(440.56)	525.51
8,019	907.57	1,435.64	58.19	1,117.46	(209.89)	318.18
1,030,972	816.17	1,291.06	58.18	861.54	(45.37)	429.51
536,401	923.88	1,461.37	58.18	955.57	(31.69)	505.80
355,686	1,053.98	1,667.10	58.17	1,207.82	(153.84)	459.29
422,750	919.28	1,454.03	58.17	1,018.84	(99.56)	435.19
373,151	207.50	328.19	58.16	250.44	(42.94)	77.75
796,169	918.85	1,453.23	58.16	972.58	(53.73)	480.65
423,446	907.86	1,435.77	58.15	1,137.16	(229.30)	298.61
385,654	851.51	1,346.56	58.14	854.28	(2.78)	492.28
891,041	872.64	1,379.99	58.14	1,100.43	(227.78)	279.56
1,008,203	841.19	1,330.23	58.14	890.51	(49.31)	439.72
486,015	1,427.83	2,257.84	58.13	1,831.35	(403.53)	426.49
855,982	879.94	1,391.46	58.13	874.93	5.01	516.53
1,367,978	207.21	327.67	58.13	260.96	(53.74)	66.71
489,828	846.41	1,338.30	58.11	1,078.93	(232.51)	259.37
310,415	821.14	1,298.32	58.11	914.53	(93.40)	383.79
406,203	925.54	1,463.37	58.11	864.11	61.43	599.26
685,607	853.96	1,350.08	58.10	979.83	(125.87)	370.25
28,652	839.11	1,326.60	58.10	1,074.15	(235.04)	252.45
1,013,498	1,196.46	1,891.51	58.09	1,470.83	(274.37)	420.68
1,219,219	1,085.56	1,716.19	58.09	1,196.91	(111.35)	519.28
1,373,590	981.71	1,552.00	58.09	1,175.66	(193.95)	376.34
381,154	948.47	1,499.43	58.09	1,102.63	(154.16)	396.80
1,081,689	1,031.16	1,630.10	58.08	1,313.87	(282.71)	316.23
467,190	915.60	1,447.37	58.08	1,011.14	(95.54)	436.22
840,917	1,085.38	1,715.66	58.07	1,353.14	(267.76)	362.52
1,313,336	1,169.46	1,848.57	58.07	1,213.93	(44.47)	634.63
549,948	990.39	1,565.51	58.07	1,011.77	(21.38)	553.74
843,742	954.99	1,509.46	58.06	1,222.72	(267.73)	286.74
1,021,594	868.04	1,371.99	58.06	1,018.29	(150.25)	353.70
1,089,488	881.10	1,392.59	58.05	1,007.45	(126.34)	385.15
955,644	1,009.17	1,594.96	58.05	1,165.65	(156.48)	429.30
1,145,401	848.27	1,340.63	58.04	872.88	(24.61)	467.75
914,023	964.56	1,524.40	58.04	1,033.97	(69.41)	490.42
1,350,529	985.17	1,556.91	58.04	1,229.62	(244.45)	327.30
20,690	882.71	1,394.96	58.03	1,101.50	(218.79)	293.46
275,496	897.90	1,418.96	58.03	1,089.07	(191.17)	329.89
969,841	869.39	1,373.90	58.03	941.44	(72.05)	432.46
838,321	904.87	1,429.93	58.03	1,092.02	(187.15)	337.91
1,138,477	1,391.83	2,199.30	58.02	1,539.97	(148.14)	659.34
812,507	992.30	1,567.87	58.00	1,185.84	(193.54)	382.04
1,321,962	921.66	1,456.23	58.00	1,078.66	(157.00)	377.57
367,747	953.03	1,505.79	58.00	1,191.33	(238.29)	314.46
217,358	1,028.58	1,625.14	58.00	1,022.28	6.30	602.86

**Customers with 57% or Higher Increases Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
536,956	877.54	1,386.40	57.99	968.10	(90.57)	418.29
680,165	913.48	1,443.17	57.99	986.17	(72.69)	457.00
424,005	1,210.45	1,912.32	57.98	1,393.18	(182.73)	519.14
1,102,187	1,148.35	1,814.13	57.98	1,461.60	(313.25)	352.54
680,082	884.77	1,397.46	57.95	898.91	(14.14)	498.55
1,130,770	893.84	1,411.78	57.95	913.28	(19.44)	498.51
401,780	977.20	1,543.44	57.95	1,153.71	(176.52)	389.73
244,280	961.21	1,518.14	57.94	978.28	(17.07)	539.86
1,088,972	1,033.92	1,632.82	57.93	1,226.72	(192.80)	406.10
468,531	925.19	1,461.11	57.93	1,063.76	(138.57)	397.34
631,833	800.00	1,263.37	57.92	881.06	(81.06)	382.31
804,821	1,148.85	1,814.24	57.92	1,361.90	(213.04)	452.34
1,215,297	885.65	1,398.58	57.92	1,133.08	(247.44)	265.50
528,271	1,061.39	1,676.11	57.92	1,258.97	(197.58)	417.14
1,342,451	918.45	1,450.31	57.91	1,058.48	(140.03)	391.83
869,976	1,183.89	1,869.41	57.90	1,388.13	(204.24)	481.28
1,395,780	1,015.99	1,604.15	57.89	1,194.43	(178.45)	409.71
1,315,637	847.50	1,338.11	57.89	928.17	(80.67)	409.94
178,249	1,089.20	1,719.67	57.88	1,316.87	(227.67)	402.80
902,932	892.65	1,409.34	57.88	933.20	(40.55)	476.14
1,053,949	796.45	1,257.39	57.88	977.29	(180.85)	280.10
769,779	1,115.15	1,760.54	57.88	1,373.07	(257.92)	387.48
380	998.04	1,575.64	57.87	1,160.22	(162.18)	415.41
495,523	1,323.79	2,089.81	57.87	1,265.78	58.01	824.03
881,112	943.71	1,489.75	57.86	1,044.66	(100.95)	445.09
26,509	937.83	1,480.46	57.86	1,012.98	(75.15)	467.48
53,448	825.86	1,303.70	57.86	1,024.47	(198.61)	279.22
734,430	1,117.03	1,763.20	57.85	1,324.30	(207.27)	438.90
859,672	854.37	1,348.59	57.85	885.15	(30.78)	463.44
392,930	207.99	328.30	57.85	250.75	(42.76)	77.55
116,126	849.97	1,341.57	57.84	1,083.42	(233.46)	258.15
990,396	900.71	1,421.63	57.83	1,028.75	(128.04)	392.88
364,346	952.54	1,503.40	57.83	1,149.50	(196.96)	353.90
785,896	903.78	1,426.36	57.82	1,085.07	(181.29)	341.29
307,909	972.73	1,535.14	57.82	1,117.76	(145.03)	417.37
494,245	1,022.14	1,613.09	57.82	1,191.86	(169.72)	421.23
978,970	889.97	1,404.34	57.80	1,138.10	(248.13)	266.24
974,783	1,098.19	1,732.86	57.79	1,380.11	(281.93)	352.74
519,610	973.11	1,535.50	57.79	969.24	3.87	566.26
386,785	848.13	1,338.27	57.79	1,042.11	(193.98)	296.16
58,913	1,005.67	1,586.73	57.78	1,231.72	(226.05)	355.01
160,016	1,145.36	1,807.05	57.77	1,266.83	(121.47)	540.22
302,182	907.22	1,431.34	57.77	1,068.34	(161.12)	363.00
317,924	1,227.25	1,936.22	57.77	1,485.51	(258.26)	450.71
1,199,449	209.06	329.81	57.76	252.72	(43.66)	77.09
135,933	969.01	1,528.68	57.76	1,244.64	(275.62)	284.04
118,045	1,015.79	1,602.44	57.75	1,212.71	(196.92)	389.73
1,026,239	916.89	1,446.37	57.75	993.83	(76.94)	452.54
631,368	1,355.88	2,138.86	57.75	1,440.71	(84.82)	698.16

**Customers with 57% or Higher Increases Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
548,099	978.71	1,543.81	57.74	903.43	75.28	640.39
877,852	905.66	1,428.56	57.74	978.20	(72.54)	450.36
1,026,791	207.96	327.99	57.72	251.56	(43.60)	76.43
439,816	1,018.27	1,605.71	57.69	1,203.54	(185.27)	402.17
1,219,254	1,058.09	1,668.50	57.69	1,124.53	(66.44)	543.97
85,076	856.33	1,350.34	57.69	853.61	2.72	496.73
1,128,703	836.90	1,319.61	57.68	902.57	(65.67)	417.04
205,516	930.46	1,467.14	57.68	1,150.16	(219.70)	316.98
194,318	830.74	1,309.90	57.68	918.99	(88.25)	390.91
353,561	1,155.92	1,822.57	57.67	1,173.95	(18.03)	648.62
751,358	796.40	1,255.62	57.66	948.85	(152.45)	306.76
918,889	844.24	1,330.95	57.65	897.67	(53.43)	433.28
273,436	209.41	330.13	57.65	248.10	(38.69)	82.03
588,144	927.95	1,462.89	57.65	1,126.96	(199.01)	335.93
1,337,777	208.61	328.83	57.63	261.57	(52.97)	67.26
412,665	824.00	1,298.83	57.62	844.98	(20.98)	453.85
821,992	940.42	1,482.07	57.60	942.20	(1.78)	539.87
101,627	953.04	1,501.95	57.60	1,215.12	(262.08)	286.83
468,972	811.85	1,279.43	57.59	835.69	(23.84)	443.73
1,017,815	809.30	1,275.33	57.58	994.25	(184.95)	281.08
649,347	1,581.74	2,492.48	57.58	1,872.63	(290.89)	619.85
1,088,686	1,317.15	2,075.43	57.57	1,439.35	(122.21)	636.08
246,913	830.26	1,308.21	57.57	976.26	(146.00)	331.95
1,102,573	1,104.50	1,740.29	57.56	1,079.53	24.97	660.77
378,609	815.18	1,284.39	57.56	996.59	(181.40)	287.81
322,662	982.99	1,548.76	57.56	1,255.77	(272.78)	292.99
693,894	1,472.96	2,320.56	57.54	1,700.26	(227.31)	620.30
148,112	892.00	1,405.28	57.54	946.67	(54.67)	458.61
940,126	812.03	1,279.27	57.54	977.43	(165.40)	301.84
932,837	982.40	1,547.61	57.53	969.82	12.58	577.79
1,322,042	843.79	1,329.21	57.53	1,078.61	(234.82)	250.61
780,293	919.06	1,447.73	57.52	1,153.89	(234.83)	293.84
951,039	1,304.83	2,055.41	57.52	1,410.99	(106.16)	644.42
15,542	842.33	1,326.84	57.52	846.41	(4.09)	480.42
993,818	895.95	1,411.26	57.52	1,133.67	(237.72)	277.59
335,111	817.61	1,287.81	57.51	790.49	27.13	497.33
1,032,554	208.86	328.96	57.51	264.11	(55.25)	64.85
426,449	986.13	1,553.15	57.50	962.34	23.79	590.82
1,389,053	906.92	1,428.32	57.49	927.72	(20.79)	500.60
1,118,657	826.45	1,301.55	57.49	916.45	(89.99)	385.11
443,119	1,214.36	1,912.41	57.48	1,501.44	(287.08)	410.98
184,876	984.25	1,550.02	57.48	1,151.06	(166.82)	398.96
957,185	1,057.71	1,665.63	57.47	1,184.53	(126.81)	481.10
1,163,668	1,147.98	1,807.77	57.47	1,222.36	(74.38)	585.41
474,622	938.62	1,478.08	57.47	1,053.20	(114.58)	424.87
1,325,658	904.15	1,423.71	57.46	1,124.73	(220.58)	298.98
64,459	841.02	1,324.31	57.46	933.12	(92.10)	391.18
272,349	212.12	334.01	57.46	261.35	(49.23)	72.65
43,438	1,079.64	1,699.96	57.46	1,305.82	(226.18)	394.15

**Customers with 57% or Higher Increases Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
916,302	1,015.08	1,598.28	57.45	934.29	80.80	663.99
1,310,780	885.96	1,394.93	57.45	965.01	(79.04)	429.92
947,908	1,058.72	1,666.93	57.45	1,058.51	0.22	608.43
527,396	823.21	1,296.02	57.43	946.14	(122.93)	349.88
578,796	899.49	1,416.06	57.43	1,135.16	(235.67)	280.90
571,259	837.06	1,317.76	57.43	903.40	(66.34)	414.36
1,396,643	920.38	1,448.90	57.42	1,071.97	(151.59)	376.93
1,381,737	1,036.59	1,631.83	57.42	1,249.38	(212.80)	382.45
80,649	209.45	329.73	57.42	263.11	(53.66)	66.62
183,090	1,203.02	1,893.76	57.42	1,400.94	(197.92)	492.83
820,436	1,741.66	2,741.63	57.41	2,103.07	(361.41)	638.55
901,684	908.21	1,429.65	57.41	1,049.09	(140.87)	380.56
41,968	1,084.25	1,706.73	57.41	1,311.60	(227.36)	395.13
272,965	860.78	1,354.77	57.39	880.61	(19.82)	474.17
382,002	911.32	1,434.29	57.38	941.43	(30.10)	492.86
294,775	941.06	1,481.00	57.38	918.48	22.58	562.52
36,104	899.38	1,415.34	57.37	915.25	(15.88)	500.09
694,387	913.25	1,437.14	57.37	1,116.44	(203.19)	320.70
445,476	981.93	1,545.11	57.36	1,231.98	(250.06)	313.13
67,100	999.58	1,572.88	57.35	1,109.94	(110.37)	462.94
637,301	847.45	1,333.50	57.35	1,035.44	(187.99)	298.06
974,322	937.29	1,474.85	57.35	1,104.33	(167.03)	370.52
375,545	212.61	334.54	57.35	262.87	(50.26)	71.67
1,226,525	969.62	1,525.67	57.35	1,190.36	(220.74)	335.31
1,381,208	2,025.24	3,186.53	57.34	2,265.84	(240.59)	920.69
172,631	539.79	849.30	57.34	666.98	(127.19)	182.32
1,205,218	867.75	1,365.29	57.34	1,091.90	(224.16)	273.39
493,747	1,087.26	1,710.65	57.34	1,357.15	(269.89)	353.50
499,706	829.90	1,305.71	57.33	1,007.66	(177.76)	298.05
1,035,498	899.60	1,415.33	57.33	1,018.03	(118.42)	397.30
450,804	948.63	1,492.44	57.33	1,136.92	(188.29)	355.52
1,344,304	941.89	1,481.81	57.32	1,051.18	(109.30)	430.63
417,130	1,577.66	2,481.73	57.30	1,940.20	(362.54)	541.53
649,875	839.12	1,319.93	57.30	1,048.07	(208.95)	271.86
484,869	932.99	1,467.56	57.30	1,009.16	(76.17)	458.40
522,186	900.84	1,416.99	57.30	1,072.39	(171.55)	344.60
1,019,496	901.04	1,417.23	57.29	858.99	42.04	558.23
60,698	860.33	1,352.99	57.26	1,103.46	(243.13)	249.54
26,725	918.20	1,443.96	57.26	948.11	(29.90)	495.85
788,113	1,154.13	1,814.93	57.26	1,477.03	(322.90)	337.90
1,273,010	896.98	1,410.55	57.26	1,114.77	(217.79)	295.78
591,765	1,496.71	2,353.64	57.25	1,887.22	(390.51)	466.41
79,504	904.71	1,422.65	57.25	979.40	(74.69)	443.25
873,868	861.44	1,354.58	57.25	891.04	(29.59)	463.55
428,239	926.67	1,457.11	57.24	1,049.15	(122.48)	407.96
833,269	1,036.83	1,630.30	57.24	1,101.66	(64.82)	528.64
207,506	1,225.00	1,926.10	57.23	1,543.89	(318.89)	382.21
374,399	1,488.70	2,340.67	57.23	1,334.47	154.23	1,006.20
1,026,096	2,078.56	3,267.62	57.21	2,310.61	(232.05)	957.01



**Customers with 57% or Higher Increases Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
1,267,117	946.60	1,488.05	57.20	1,087.67	(141.06)	400.38
124,323	1,129.72	1,775.87	57.20	1,406.35	(276.63)	369.52
151,153	927.99	1,458.69	57.19	1,081.78	(153.79)	376.91
936,344	210.62	331.07	57.19	247.68	(37.06)	83.39
424,544	870.39	1,368.13	57.19	1,023.98	(153.60)	344.14
2,625	884.94	1,390.96	57.18	958.26	(73.32)	432.70
1,361,958	873.44	1,372.88	57.18	1,101.05	(227.61)	271.82
906,056	887.18	1,394.42	57.17	870.59	16.59	523.82
872,189	969.65	1,524.01	57.17	1,119.32	(149.67)	404.69
820,771	821.43	1,291.00	57.17	854.86	(33.43)	436.14
1,391,509	1,176.55	1,849.12	57.16	1,123.06	53.49	726.06
7,946	1,063.88	1,672.02	57.16	1,033.16	30.72	638.85
406,913	1,095.59	1,721.83	57.16	1,382.98	(287.39)	338.85
158,599	872.85	1,371.73	57.16	1,104.77	(231.92)	266.96
37,700	978.56	1,537.86	57.16	1,160.71	(182.15)	377.15
277,562	869.62	1,366.53	57.14	928.80	(59.18)	437.73
1,300,523	1,131.96	1,778.76	57.14	1,403.58	(271.62)	375.18
1,231,249	1,836.68	2,886.17	57.14	2,265.01	(428.33)	621.15
797,079	3,960.18	6,222.94	57.14	5,006.99	(1,046.81)	1,215.95
355,529	1,055.77	1,658.98	57.13	1,145.02	(89.25)	513.96
329,341	1,049.37	1,648.88	57.13	1,347.24	(297.87)	301.64
599,345	905.33	1,422.51	57.13	1,098.22	(192.89)	324.29
1,365,226	970.69	1,525.20	57.13	1,071.87	(101.18)	453.33
1,025,665	908.88	1,428.05	57.12	995.30	(86.42)	432.75
225,465	857.53	1,347.33	57.12	969.65	(112.12)	377.68
157,900	861.96	1,354.24	57.11	1,028.44	(166.48)	325.80
1,053,278	1,001.42	1,573.34	57.11	1,263.77	(262.36)	309.57
705,344	824.85	1,295.92	57.11	976.91	(152.06)	319.01
56,207	920.43	1,446.07	57.11	1,050.91	(130.49)	395.15
227,301	1,148.48	1,804.36	57.11	1,195.52	(47.04)	608.84
1,052,856	936.92	1,471.97	57.11	1,108.93	(172.02)	363.04
528,805	1,019.51	1,601.50	57.08	1,141.87	(122.36)	459.62
496,116	1,348.64	2,118.46	57.08	1,624.64	(276.00)	493.82
788,995	914.84	1,437.05	57.08	1,135.25	(220.41)	301.79
223,873	805.22	1,264.82	57.08	919.27	(114.04)	345.56
843,878	1,054.02	1,655.54	57.07	1,085.65	(31.64)	569.89
986,818	1,136.97	1,785.79	57.07	1,183.90	(46.92)	601.90
855,725	891.74	1,400.59	57.06	867.06	24.68	533.54
204,998	918.65	1,442.83	57.06	1,010.78	(92.13)	432.05
582,341	806.11	1,266.06	57.06	885.47	(79.36)	380.59
782,200	858.96	1,348.97	57.05	951.40	(92.44)	397.58
108,111	839.56	1,318.37	57.03	1,049.90	(210.34)	268.47
1,157,137	842.87	1,323.50	57.02	869.69	(26.81)	453.82
392,045	919.71	1,444.14	57.02	1,035.03	(115.32)	409.11
607,043	1,042.68	1,637.19	57.02	1,169.38	(126.69)	467.81
971,708	898.87	1,411.28	57.01	863.13	35.74	548.15
154,050	928.27	1,457.34	57.00	1,141.09	(212.82)	316.25



**Detail of Rate and Cost Calculations for Customer ID 18,953**

**Present Rate (ECT-2)**

	Days	\$/Day	On-Peak kWh	\$/On-Peak kWh	Off-Peak kWh	\$/Off-Peak kWh	On-Peak kW	\$/On-Peak kW	Bill
January	30	0.556	153.60	0.05747	677.68	0.04107	3.78	9.30	\$ 88.49
February	28	0.556	56.85	0.05747	215.18	0.04107	1.62	9.30	42.74
March	31	0.556	36.43	0.05747	155.20	0.04107	0.72	9.30	32.40
April	30	0.556	34.49	0.05747	124.32	0.04107	0.41	9.30	27.58
May	31	0.556	49.14	0.08867	199.95	0.04417	4.00	13.50	84.43
June	30	0.556	123.46	0.08867	245.72	0.04417	5.86	13.50	117.59
July	31	0.556	133.39	0.08867	256.27	0.04417	6.35	13.50	126.11
August	31	0.556	154.74	0.08867	376.79	0.04417	5.33	13.50	119.55
September	30	0.556	89.20	0.08867	175.72	0.04417	6.71	13.50	122.94
October	31	0.556	48.74	0.08867	185.52	0.04417	4.11	13.50	85.24
November	29	0.556	50.16	0.05747	288.23	0.04107	2.96	9.30	58.37
December	31	0.556	53.00	0.05747	319.95	0.04107	0.79	9.30	40.77
									\$ 946.21

**Proposed Rate (R-XS)**

	Days	\$/Day	All kWh	\$/kWh	Bill
January	30	0.592	831.28	0.10324	\$ 103.58
February	28	0.592	272.03	0.10324	44.66
March	31	0.592	191.63	0.10324	38.14
April	30	0.592	158.81	0.10324	34.16
May	31	0.592	249.09	0.10324	44.07
June	30	0.592	369.18	0.10324	55.87
July	31	0.592	389.66	0.10324	58.58
August	31	0.592	531.53	0.10324	73.23
September	30	0.592	264.92	0.10324	45.11
October	31	0.592	234.26	0.10324	42.54
November	29	0.592	338.39	0.10324	52.10
December	31	0.592	372.95	0.10324	56.86
					\$ 648.89

**Cost of Service**

	Units	Unit Cost	Total Cost
4 CP	1.69	\$ 167.73	\$ 283.46
NCP	3.08	\$ 63.04	194.16
Indiv. max	8.74	\$ 23.89	208.80
Energy	4,203.73	\$ 0.05226	219.69
Customers	1.00	\$ 181.77	181.77
Total			\$ 1,087.88

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

<u>CUSTOMERID</u>	<u>Present Bill</u>	<u>APS Proposed</u>	<u>% Increase</u>	<u>Cost of Service</u>	<u>Present - Cost</u>	<u>Proposed - Cost</u>
474,741	1,509.04	706.00	(53.22)	1,928.32	(419.28)	(1,222.33)
196,091	686.73	352.66	(48.65)	543.92	142.81	(191.26)
1,015,748	530.90	282.48	(46.79)	556.99	(26.09)	(274.51)
1,212,201	631.37	355.06	(43.76)	630.31	1.07	(275.25)
997,491	1,695.06	957.35	(43.52)	1,575.96	119.10	(618.61)
342,616	755.84	446.67	(40.90)	692.66	63.17	(245.99)
62,006	657.14	392.49	(40.27)	752.92	(95.77)	(360.43)
986,050	954.59	589.22	(38.27)	872.03	82.56	(282.81)
63,672	1,079.74	683.30	(36.72)	1,053.87	25.88	(370.56)
992,053	1,032.73	658.86	(36.20)	1,180.75	(148.02)	(521.90)
305,686	445.72	285.92	(35.85)	420.74	24.98	(134.82)
304,996	813.79	526.07	(35.36)	884.40	(70.61)	(358.32)
604,099	523.53	341.11	(34.84)	554.50	(30.98)	(213.40)
172,441	591.57	386.57	(34.65)	525.98	65.59	(139.41)
590,655	959.77	629.07	(34.46)	1,128.35	(168.57)	(499.28)
224,636	970.40	636.95	(34.36)	1,276.98	(306.57)	(640.03)
671,741	937.57	618.04	(34.08)	1,209.36	(271.79)	(591.32)
1,223,768	1,146.75	758.05	(33.90)	962.67	184.08	(204.62)
1,136,036	1,145.33	762.22	(33.45)	1,636.21	(490.88)	(873.98)
682,792	1,419.79	948.10	(33.22)	1,430.65	(10.87)	(482.55)
484,881	1,042.85	697.05	(33.16)	1,250.53	(207.68)	(553.48)
576,490	1,309.45	876.74	(33.05)	1,230.55	78.90	(353.82)
230,301	1,095.02	733.22	(33.04)	1,004.96	90.06	(271.74)
639,172	701.35	471.64	(32.75)	592.15	109.20	(120.51)
1,218,013	747.68	506.50	(32.26)	967.61	(219.93)	(461.11)
1,263,299	892.15	609.57	(31.67)	899.09	(6.95)	(289.53)
1,218,012	617.61	422.86	(31.53)	720.69	(103.07)	(297.82)
1,019,080	5,860.18	4,017.01	(31.45)	5,174.85	685.33	(1,157.84)
18,953	946.21	648.89	(31.42)	1,087.88	(141.68)	(438.99)
10,102	1,168.11	801.34	(31.40)	1,666.77	(498.67)	(865.44)
1,262,617	579.75	398.41	(31.28)	614.63	(34.88)	(216.22)
1,162,682	1,113.73	768.90	(30.96)	982.47	131.26	(213.57)
5,084	1,092.76	754.84	(30.92)	1,099.36	(6.60)	(344.52)
810,693	7,301.28	5,050.74	(30.82)	6,431.27	870.00	(1,380.53)
1,060,842	878.61	607.95	(30.80)	1,055.29	(176.69)	(447.34)
621,958	1,173.89	813.12	(30.73)	1,004.25	169.64	(191.13)
261,389	1,080.68	749.40	(30.65)	1,294.61	(213.93)	(545.20)
585,367	1,154.75	801.53	(30.59)	1,215.30	(60.55)	(413.77)
468,153	695.10	483.56	(30.43)	819.93	(124.83)	(336.37)
821,646	902.24	630.81	(30.08)	1,357.86	(455.62)	(727.04)
912,087	15,197.19	10,625.35	(30.08)	13,430.53	1,766.66	(2,805.18)
328,065	6,738.79	4,718.38	(29.98)	5,756.32	982.47	(1,037.94)
216,408	1,078.77	755.59	(29.96)	1,635.41	(556.64)	(879.82)
582,060	1,011.88	710.58	(29.78)	915.37	96.51	(204.79)
1,025,264	1,087.00	763.49	(29.76)	1,259.11	(172.11)	(495.63)
1,186,983	3,098.14	2,177.76	(29.71)	2,825.06	273.08	(647.30)
570,848	11,733.95	8,256.71	(29.63)	10,302.70	1,431.25	(2,045.99)
757,307	972.00	684.21	(29.61)	879.54	92.45	(195.33)
386,132	786.64	553.95	(29.58)	907.69	(121.05)	(353.75)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
1,074,104	917.34	646.55	(29.52)	843.54	73.80	(196.99)
1,298,174	6,963.33	4,908.48	(29.51)	6,399.95	563.38	(1,491.47)
593,264	1,032.99	729.70	(29.36)	1,571.45	(538.46)	(841.75)
241,578	731.91	517.27	(29.33)	1,043.92	(312.01)	(526.65)
105,030	753.07	533.37	(29.17)	722.36	30.71	(188.99)
60,451	1,112.71	788.19	(29.16)	1,193.57	(80.86)	(405.38)
325,010	933.08	661.87	(29.07)	1,078.73	(145.65)	(416.85)
1,279,223	1,083.34	769.34	(28.98)	1,117.38	(34.05)	(348.04)
239,775	1,255.03	892.70	(28.87)	1,304.58	(49.54)	(411.88)
1,253,215	1,011.29	719.71	(28.83)	1,841.00	(829.71)	(1,121.29)
650,708	1,321.96	943.54	(28.63)	1,281.33	40.63	(337.79)
691,824	945.87	675.37	(28.60)	1,484.63	(538.76)	(809.27)
144,449	885.62	633.30	(28.49)	1,133.97	(248.35)	(500.67)
394,140	5,769.36	4,126.04	(28.48)	5,006.55	762.81	(880.51)
867,291	1,046.86	749.02	(28.45)	921.86	125.01	(172.84)
1,162,759	799.58	572.40	(28.41)	833.22	(33.63)	(260.82)
146,824	636.42	456.20	(28.32)	564.05	72.37	(107.85)
988,008	921.97	661.41	(28.26)	1,101.33	(179.36)	(439.93)
1,199,152	921.48	662.70	(28.08)	1,196.42	(274.93)	(533.72)
323,083	1,096.78	791.75	(27.81)	1,216.96	(120.18)	(425.21)
683,782	632.50	456.85	(27.77)	856.69	(224.19)	(399.84)
103,992	1,084.85	784.88	(27.65)	1,586.03	(501.18)	(801.15)
1,075,527	932.95	675.06	(27.64)	821.46	111.49	(146.40)
984,630	1,132.55	820.08	(27.59)	984.70	147.85	(164.62)
1,281,374	729.59	528.86	(27.51)	867.27	(137.67)	(338.41)
916,575	12,535.12	9,086.58	(27.51)	10,890.19	1,644.93	(1,803.61)
1,309,433	1,069.19	775.12	(27.50)	1,100.76	(31.58)	(325.64)
583,984	6,994.74	5,072.13	(27.49)	6,588.67	406.08	(1,516.53)
1,323,069	1,201.51	871.55	(27.46)	1,624.90	(423.40)	(753.35)
621,597	13,268.07	9,627.81	(27.44)	11,466.36	1,801.71	(1,838.56)
705,719	6,958.69	5,054.77	(27.36)	6,378.48	580.22	(1,323.70)
679,970	959.88	697.43	(27.34)	1,199.44	(239.56)	(502.02)
1,068,280	7,447.00	5,412.09	(27.33)	6,921.75	525.25	(1,509.66)
584,464	1,075.12	781.47	(27.31)	1,452.56	(377.45)	(671.10)
830,369	582.19	423.18	(27.31)	616.48	(34.29)	(193.30)
1,077,036	7,403.74	5,394.25	(27.14)	6,819.75	583.99	(1,425.50)
907,921	1,082.45	788.75	(27.13)	981.86	100.59	(193.11)
921,814	4,570.05	3,331.16	(27.11)	4,066.95	503.10	(735.78)
1,307,958	802.69	585.22	(27.09)	1,317.59	(514.90)	(732.36)
1,074,783	6,127.97	4,473.90	(26.99)	5,430.31	697.66	(956.42)
710,304	7,795.12	5,699.81	(26.88)	7,261.94	533.18	(1,562.13)
127,963	1,084.97	794.08	(26.81)	1,345.67	(260.70)	(551.59)
865,838	1,162.29	850.87	(26.79)	1,656.40	(494.11)	(805.53)
913,201	590.99	432.64	(26.79)	529.80	61.19	(97.16)
500,800	357.03	261.45	(26.77)	338.92	18.11	(77.47)
616,903	6,210.61	4,548.41	(26.76)	5,557.60	653.01	(1,009.20)
92,821	1,125.68	824.71	(26.74)	1,122.82	2.87	(298.11)
809,465	6,297.81	4,618.82	(26.66)	5,815.38	482.43	(1,196.56)
60,234	1,041.98	764.24	(26.65)	1,073.95	(31.97)	(309.70)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
575,547	1,060.37	777.92	(26.64)	1,206.43	(146.06)	(428.51)
488,081	5,766.70	4,236.57	(26.53)	5,132.40	634.29	(895.83)
1,305,629	1,068.68	785.16	(26.53)	1,557.49	(488.81)	(772.33)
1,218,625	1,030.95	757.46	(26.53)	1,603.16	(572.21)	(845.71)
1,146,533	1,186.15	872.02	(26.48)	1,475.83	(289.68)	(603.81)
237,630	1,097.99	807.25	(26.48)	1,279.65	(181.66)	(472.40)
1,235,933	1,107.77	814.80	(26.45)	1,155.59	(47.82)	(340.79)
233,974	875.79	645.24	(26.32)	1,263.93	(388.14)	(618.69)
157,816	520.06	383.22	(26.31)	748.20	(228.14)	(364.98)
878,966	1,166.52	859.74	(26.30)	1,477.16	(310.64)	(617.42)
306,464	5,784.84	4,269.38	(26.20)	9,979.96	(4,195.12)	(5,710.58)
491,423	999.39	737.64	(26.19)	1,183.48	(184.10)	(445.85)
1,201,599	1,166.91	861.60	(26.16)	1,365.68	(198.77)	(504.08)
552,686	10,597.76	7,826.00	(26.15)	9,534.30	1,063.46	(1,708.30)
1,327,650	1,069.73	790.20	(26.13)	1,264.05	(194.32)	(473.85)
759,199	805.98	595.73	(26.09)	946.69	(140.71)	(350.97)
1,143,008	1,033.96	764.31	(26.08)	1,128.82	(94.86)	(364.51)
947,696	6,729.17	4,979.12	(26.01)	6,190.19	538.98	(1,211.07)
777,635	1,160.16	859.07	(25.95)	1,157.06	3.10	(297.99)
708,888	10,543.21	7,813.54	(25.89)	9,203.81	1,339.40	(1,390.27)
1,111,885	1,046.65	775.73	(25.88)	1,311.58	(264.93)	(535.85)
803,125	809.66	600.58	(25.82)	787.25	22.41	(186.66)
1,397,027	6,750.26	5,009.79	(25.78)	6,318.62	431.63	(1,308.83)
1,113,814	788.28	585.06	(25.78)	935.64	(147.37)	(350.58)
536,344	1,018.02	755.75	(25.76)	1,006.59	11.43	(250.83)
655,729	899.65	667.90	(25.76)	1,156.85	(257.21)	(488.96)
857,017	1,229.34	912.74	(25.75)	2,032.22	(802.88)	(1,119.48)
1,205,317	959.43	712.52	(25.74)	1,025.26	(65.84)	(312.74)
205,679	7,817.76	5,810.72	(25.67)	6,910.26	907.51	(1,099.54)
1,074,885	6,860.71	5,099.43	(25.67)	6,187.04	673.67	(1,087.61)
899,433	1,208.02	898.03	(25.66)	1,249.22	(41.20)	(351.19)
1,256,438	1,087.27	808.29	(25.66)	2,077.22	(989.95)	(1,268.93)
1,155,225	953.90	709.93	(25.58)	1,459.75	(505.85)	(749.82)
957,155	447.89	333.58	(25.52)	397.62	50.26	(64.04)
57,794	1,266.50	943.92	(25.47)	1,645.75	(379.25)	(701.84)
1,056,164	1,133.02	845.09	(25.41)	2,267.79	(1,134.77)	(1,422.70)
932,328	9,822.36	7,326.64	(25.41)	8,857.97	964.39	(1,531.34)
395,899	1,194.63	891.19	(25.40)	1,243.12	(48.49)	(351.93)
1,060,760	7,257.84	5,414.96	(25.39)	7,079.18	178.65	(1,664.23)
1,204,971	1,117.42	834.29	(25.34)	1,452.64	(335.22)	(618.36)
1,002,667	1,022.02	763.13	(25.33)	1,116.93	(94.91)	(353.80)
1,331,125	7,872.39	5,881.21	(25.29)	7,799.44	72.95	(1,918.23)
492,374	1,086.41	812.53	(25.21)	1,409.33	(322.93)	(596.80)
630,080	1,182.91	885.46	(25.15)	1,428.76	(245.84)	(543.30)
894,605	847.60	634.54	(25.14)	957.68	(110.09)	(323.14)
1,395,209	5,669.95	4,246.89	(25.10)	5,052.90	617.05	(806.01)
1,392,797	5,008.44	3,751.59	(25.09)	4,632.39	376.05	(880.80)
1,012,007	1,175.40	880.95	(25.05)	1,037.67	137.73	(156.72)
470,457	5,030.68	3,771.32	(25.03)	4,880.02	150.66	(1,108.70)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
1,061,289	1,232.89	924.31	(25.03)	1,544.55	(311.66)	(620.24)
517,300	9,548.38	7,160.17	(25.01)	9,057.85	490.54	(1,897.68)
372,950	4,146.77	3,111.90	(24.96)	3,752.75	394.02	(640.85)
1,295,057	5,559.14	4,172.09	(24.95)	4,876.24	682.90	(704.15)
973,056	1,258.98	945.35	(24.91)	1,167.51	91.48	(222.16)
1,209,081	1,062.30	797.86	(24.89)	1,394.49	(332.18)	(596.63)
930,324	1,248.39	937.76	(24.88)	1,721.44	(473.05)	(783.68)
545,680	505.03	379.50	(24.86)	463.50	41.53	(84.00)
160,762	1,126.59	846.88	(24.83)	1,244.58	(118.00)	(397.70)
958,229	936.99	704.42	(24.82)	1,147.78	(210.80)	(443.37)
351,769	1,022.11	768.64	(24.80)	1,224.25	(202.14)	(455.61)
115,356	7,183.86	5,404.08	(24.77)	6,295.85	888.02	(891.77)
466,303	1,097.74	826.03	(24.75)	1,089.51	8.23	(263.48)
558,990	996.26	750.00	(24.72)	1,278.94	(282.68)	(528.94)
570,572	1,218.26	917.34	(24.70)	1,680.39	(462.13)	(763.05)
997,699	1,221.01	919.67	(24.68)	1,325.90	(104.90)	(406.23)
298,498	1,149.00	865.71	(24.66)	1,553.05	(404.05)	(687.34)
579,842	5,270.66	3,971.34	(24.65)	5,081.97	188.69	(1,110.63)
883,955	14,345.44	10,810.11	(24.64)	12,986.90	1,358.54	(2,176.79)
830,667	1,237.66	932.65	(24.64)	1,316.47	(78.81)	(383.82)
718,831	881.45	664.95	(24.56)	774.94	106.51	(110.00)
1,189,489	972.02	734.06	(24.48)	1,117.82	(145.80)	(383.76)
1,161,786	1,267.65	958.27	(24.41)	1,710.38	(442.73)	(752.11)
1,406,175	7,638.43	5,780.05	(24.33)	6,897.86	740.57	(1,117.81)
681,630	8,201.39	6,208.41	(24.30)	7,444.51	756.88	(1,236.09)
754,242	6,457.74	4,892.35	(24.24)	6,506.07	(48.33)	(1,613.72)
955,792	4,039.72	3,061.12	(24.22)	3,627.92	411.80	(566.79)
608,569	933.06	707.60	(24.16)	1,011.57	(78.51)	(303.98)
473,843	1,209.73	917.86	(24.13)	1,750.24	(540.51)	(832.38)
1,083,620	1,231.94	935.28	(24.08)	1,401.18	(169.24)	(465.89)
1,218,070	915.51	695.12	(24.07)	1,213.03	(297.52)	(517.91)
244,574	6,121.42	4,651.26	(24.02)	5,970.19	151.23	(1,318.94)
51,189	766.37	582.43	(24.00)	739.53	26.84	(157.10)
298,484	5,726.19	4,352.10	(24.00)	5,251.06	475.13	(898.96)
964,455	1,094.77	832.18	(23.99)	1,739.16	(644.39)	(906.99)
1,164,480	608.78	463.13	(23.92)	596.05	12.72	(132.93)
184,092	3,272.27	2,490.17	(23.90)	2,986.56	285.71	(496.38)
681,999	7,751.39	5,898.85	(23.90)	7,089.78	661.61	(1,190.93)
310,599	816.97	621.83	(23.89)	1,364.32	(547.36)	(742.50)
920,942	723.56	550.74	(23.88)	1,018.48	(294.92)	(467.74)
1,015,451	4,886.64	3,724.69	(23.78)	4,930.97	(44.32)	(1,206.28)
985,467	5,969.64	4,550.65	(23.77)	6,032.27	(62.63)	(1,481.62)
864,537	8,462.72	6,451.61	(23.76)	7,851.43	611.30	(1,399.82)
698,224	1,151.00	877.48	(23.76)	1,638.28	(487.28)	(760.80)
1,079,240	1,111.79	847.93	(23.73)	1,591.11	(479.32)	(743.18)
700,710	1,068.27	815.17	(23.69)	1,496.92	(428.64)	(681.75)
78,535	793.82	605.80	(23.69)	952.82	(159.00)	(347.03)
639,226	918.45	701.29	(23.64)	946.63	(28.18)	(245.35)
521,412	6,232.76	4,759.38	(23.64)	5,554.76	678.00	(795.38)



**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
918,189	10,008.41	7,643.94	(23.62)	8,837.98	1,170.43	(1,194.04)
1,396,936	4,700.13	3,590.84	(23.60)	4,571.13	129.00	(980.29)
1,294,905	766.27	585.56	(23.58)	1,420.11	(653.83)	(834.54)
416,800	1,140.49	871.61	(23.58)	1,617.83	(477.34)	(746.21)
320,132	887.16	678.12	(23.56)	813.15	74.01	(135.03)
571,666	931.67	712.16	(23.56)	930.20	1.48	(218.04)
1,329,562	1,242.90	950.08	(23.56)	1,372.48	(129.58)	(422.40)
387,318	2,708.79	2,070.70	(23.56)	2,451.30	257.49	(380.60)
1,324,539	856.30	654.63	(23.55)	955.14	(98.84)	(300.51)
394,984	1,102.76	843.42	(23.52)	1,081.39	21.37	(237.98)
1,408,961	4,970.97	3,802.19	(23.51)	4,599.23	371.74	(797.04)
493,257	14,207.15	10,867.49	(23.51)	12,758.48	1,448.67	(1,891.00)
163,650	1,031.93	789.38	(23.50)	1,042.06	(10.14)	(252.68)
304,862	1,178.58	901.69	(23.49)	1,092.60	85.98	(190.90)
1,270,088	7,690.88	5,884.30	(23.49)	6,902.43	788.45	(1,018.13)
37,628	840.16	642.82	(23.49)	835.30	4.86	(192.48)
936,892	1,008.32	771.80	(23.46)	1,046.11	(37.79)	(274.30)
448,615	432.95	331.55	(23.42)	644.06	(211.11)	(312.51)
14,438	1,103.68	845.18	(23.42)	1,265.28	(161.60)	(420.09)
668,296	8,177.19	6,264.52	(23.39)	7,535.38	641.81	(1,270.86)
1,050,876	6,352.76	4,868.11	(23.37)	5,815.23	537.53	(947.12)
472,608	1,032.32	791.18	(23.36)	1,242.98	(210.66)	(451.80)
13,633	5,308.07	4,068.60	(23.35)	5,026.96	281.12	(958.36)
862,909	4,790.09	3,673.56	(23.31)	4,254.94	535.16	(581.38)
1,265,775	4,919.48	3,773.82	(23.29)	4,561.89	357.59	(788.07)
280,545	4,020.61	3,085.28	(23.26)	3,637.11	383.50	(551.83)
1,039,477	1,085.19	832.94	(23.24)	1,117.22	(32.03)	(284.28)
4,961	7,874.65	6,045.25	(23.23)	6,978.77	895.88	(933.51)
786,630	1,215.30	933.03	(23.23)	1,728.45	(513.14)	(795.41)
706,272	7,045.00	5,409.04	(23.22)	6,232.92	812.08	(823.88)
1,149,274	1,173.21	900.98	(23.20)	1,257.13	(83.92)	(356.15)
1,376,226	4,345.10	3,337.00	(23.20)	4,021.89	323.20	(684.90)
1,107,853	1,022.02	785.01	(23.19)	1,023.68	(1.66)	(238.67)
844,894	1,185.69	910.79	(23.18)	1,302.16	(116.47)	(391.37)
729,185	6,705.67	5,156.14	(23.11)	6,493.56	212.11	(1,337.43)
1,094,535	9,558.03	7,349.87	(23.10)	8,714.99	843.04	(1,365.11)
1,311,985	8,471.89	6,515.07	(23.10)	8,457.12	14.76	(1,942.05)
410,237	4,466.41	3,435.73	(23.08)	4,056.34	410.07	(620.61)
643,520	1,096.31	843.48	(23.06)	1,068.59	27.72	(225.12)
1,057,030	4,820.36	3,709.13	(23.05)	4,613.72	206.63	(904.60)
1,051,277	7,161.25	5,510.96	(23.04)	6,753.83	407.43	(1,242.86)
1,306,575	1,086.84	836.54	(23.03)	1,148.58	(61.74)	(312.04)
1,296,105	5,232.97	4,027.92	(23.03)	4,865.06	367.91	(837.14)
263,427	967.37	744.86	(23.00)	1,303.86	(336.49)	(559.00)
160,743	4,216.95	3,247.31	(22.99)	4,114.73	102.23	(867.42)
918,216	1,174.45	904.42	(22.99)	1,255.87	(81.42)	(351.45)
34,858	5,825.90	4,487.13	(22.98)	5,191.25	634.65	(704.12)
1,263,403	875.07	674.15	(22.96)	1,131.89	(256.82)	(457.74)
1,273,738	6,780.74	5,224.12	(22.96)	6,618.60	162.15	(1,394.47)



**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
360,334	889.96	685.73	(22.95)	1,029.50	(139.54)	(343.77)
1,104,062	1,062.61	819.04	(22.92)	1,045.74	16.86	(226.71)
946,671	3,522.24	2,715.08	(22.92)	3,733.07	(210.83)	(1,017.99)
450,418	825.53	636.36	(22.92)	1,424.58	(599.05)	(788.22)
12,619	693.85	534.96	(22.90)	846.05	(152.20)	(311.09)
907,689	1,125.76	868.54	(22.85)	1,227.07	(101.31)	(358.54)
139,548	4,629.31	3,572.30	(22.83)	4,505.83	123.48	(933.53)
1,396,891	7,999.04	6,174.16	(22.81)	7,119.27	879.77	(945.10)
255,615	7,722.40	5,961.14	(22.81)	7,174.99	547.41	(1,213.85)
76,442	945.21	729.64	(22.81)	864.14	81.07	(134.51)
1,227,770	1,029.38	794.82	(22.79)	1,296.52	(267.13)	(501.69)
1,225,574	5,020.39	3,876.61	(22.78)	4,753.26	267.13	(876.65)
1,259,520	1,096.41	846.74	(22.77)	1,207.13	(110.71)	(360.38)
199,019	3,448.61	2,664.03	(22.75)	3,611.25	(162.64)	(947.22)
524,160	9,265.41	7,160.99	(22.71)	8,285.97	979.45	(1,124.98)
562,679	3,810.87	2,945.33	(22.71)	3,432.40	378.47	(487.07)
1,215,857	741.81	573.48	(22.69)	816.12	(74.31)	(242.64)
4,905	6,046.23	4,674.47	(22.69)	5,442.65	603.58	(768.18)
90,677	7,577.24	5,858.76	(22.68)	6,921.07	656.18	(1,062.31)
817,519	978.74	756.93	(22.66)	894.03	84.71	(137.11)
171,463	3,492.48	2,700.99	(22.66)	3,135.61	356.87	(434.62)
1,034,640	5,532.75	4,280.28	(22.64)	5,065.17	467.58	(784.88)
1,267,536	519.61	402.04	(22.63)	654.06	(134.45)	(252.03)
205,700	5,274.12	4,082.52	(22.59)	4,749.29	524.82	(666.78)
283,623	2,836.34	2,195.53	(22.59)	2,556.08	280.26	(360.56)
200,750	6,927.56	5,364.55	(22.56)	7,504.26	(576.70)	(2,139.71)
240,350	6,198.06	4,802.70	(22.51)	5,673.24	524.82	(870.54)
783,555	4,758.01	3,688.10	(22.49)	4,446.02	311.99	(757.92)
160,627	559.18	433.81	(22.42)	568.33	(9.15)	(134.51)
383,891	900.39	698.63	(22.41)	1,101.22	(200.83)	(402.60)
1,185,974	851.37	660.82	(22.38)	1,113.07	(261.69)	(452.25)
1,396,897	7,661.97	5,947.32	(22.38)	6,997.64	664.33	(1,050.31)
1,260,703	985.79	765.44	(22.35)	1,652.63	(666.84)	(887.19)
368,788	673.25	522.79	(22.35)	870.97	(197.72)	(348.18)
449,942	3,839.47	2,981.46	(22.35)	3,415.71	423.76	(434.25)
303,027	5,610.23	4,357.91	(22.32)	5,945.16	(334.93)	(1,587.24)
906,204	4,128.34	3,207.00	(22.32)	3,815.47	312.87	(608.47)
1,066,106	961.60	747.15	(22.30)	999.78	(38.18)	(252.62)
1,069,848	2,623.85	2,039.42	(22.27)	2,389.41	234.44	(349.99)
822,148	1,153.98	897.04	(22.26)	1,627.20	(473.23)	(730.16)
1,182,048	5,002.50	3,889.06	(22.26)	4,814.80	187.70	(925.74)
1,181,772	1,061.24	825.13	(22.25)	1,532.69	(471.44)	(707.55)
71,905	8,066.81	6,273.37	(22.23)	7,178.91	887.91	(905.53)
879,144	1,055.15	820.59	(22.23)	1,259.54	(204.39)	(438.95)
549,275	676.81	526.45	(22.22)	698.99	(22.18)	(172.54)
154,819	5,057.67	3,934.88	(22.20)	4,516.13	541.54	(581.25)
546,313	8,473.95	6,595.72	(22.16)	7,957.79	516.16	(1,362.07)
41,739	4,952.85	3,855.23	(22.16)	5,245.97	(293.11)	(1,390.73)
17,154	1,173.18	913.30	(22.15)	1,492.11	(318.93)	(578.81)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
39,837	890.56	693.29	(22.15)	1,152.50	(261.94)	(459.20)
389,882	3,225.08	2,510.69	(22.15)	2,873.86	351.21	(363.17)
54,683	3,347.80	2,606.23	(22.15)	3,054.19	293.61	(447.96)
1,236,465	840.08	654.29	(22.12)	1,199.21	(359.14)	(544.92)
960,010	6,961.90	5,423.32	(22.10)	6,424.96	536.94	(1,001.64)
868,695	7,615.10	5,933.21	(22.09)	7,573.29	41.81	(1,640.08)
1,051,317	4,632.85	3,609.74	(22.08)	4,830.98	(198.13)	(1,221.24)
875,278	751.42	586.02	(22.01)	958.13	(206.72)	(372.11)
1,396,729	1,106.00	862.85	(21.98)	1,099.20	6.80	(236.35)
556,613	1,205.72	940.65	(21.98)	1,721.35	(515.63)	(780.70)
1,213,500	1,115.84	870.89	(21.95)	1,336.48	(220.64)	(465.59)
355,708	1,135.62	886.40	(21.95)	1,555.86	(420.23)	(669.46)
247,197	481.62	376.02	(21.93)	635.63	(154.01)	(259.61)
1,132,108	8,771.91	6,849.70	(21.91)	8,260.93	510.98	(1,411.22)
559,959	1,219.27	952.17	(21.91)	1,423.25	(203.98)	(471.07)
362,058	837.50	654.26	(21.88)	1,932.83	(1,095.33)	(1,278.57)
1,406,172	7,318.41	5,717.68	(21.87)	7,007.79	310.62	(1,290.10)
1,190,612	912.47	712.94	(21.87)	868.62	43.86	(155.68)
683,722	1,205.02	941.94	(21.83)	2,191.21	(986.19)	(1,249.27)
577,646	4,159.06	3,252.13	(21.81)	3,850.79	308.27	(598.66)
190,840	1,044.32	816.63	(21.80)	1,935.90	(891.58)	(1,119.27)
899,554	4,107.92	3,212.43	(21.80)	4,006.30	101.62	(793.87)
333,350	3,233.92	2,529.01	(21.80)	3,992.12	(758.20)	(1,463.11)
1,133,019	883.01	690.79	(21.77)	1,534.07	(651.06)	(843.28)
365,661	921.37	720.82	(21.77)	1,196.32	(274.95)	(475.50)
1,001,109	824.09	645.01	(21.73)	1,200.77	(376.68)	(555.76)
27,599	8,807.72	6,895.05	(21.72)	8,538.35	269.38	(1,643.30)
33,018	6,937.31	5,432.66	(21.69)	7,192.31	(255.00)	(1,759.65)
357,531	4,106.06	3,216.14	(21.67)	4,185.35	(79.29)	(969.22)
62,364	924.80	724.38	(21.67)	886.75	38.05	(162.37)
116,886	964.70	755.74	(21.66)	1,098.13	(133.43)	(342.39)
1,153,107	6,925.91	5,425.82	(21.66)	6,387.08	538.83	(961.26)
161,928	6,921.21	5,422.47	(21.65)	6,343.11	578.10	(920.64)
1,395,055	7,189.13	5,632.77	(21.65)	6,801.66	387.47	(1,168.89)
584,291	750.97	588.50	(21.63)	705.31	45.66	(116.81)
681,322	1,080.17	846.52	(21.63)	1,492.93	(412.76)	(646.41)
473,481	1,185.33	929.58	(21.58)	1,635.38	(450.05)	(705.79)
582,564	7,771.11	6,095.01	(21.57)	7,328.83	442.27	(1,233.82)
738,281	961.51	754.13	(21.57)	1,050.92	(89.42)	(296.79)
679,123	932.65	731.50	(21.57)	1,410.74	(478.09)	(679.24)
906,838	1,039.29	815.35	(21.55)	2,057.48	(1,018.19)	(1,242.14)
1,404,132	6,089.78	4,778.63	(21.53)	5,581.47	508.30	(802.84)
383,772	576.19	452.17	(21.52)	622.90	(46.70)	(170.72)
796,896	7,795.59	6,119.51	(21.50)	7,295.10	500.49	(1,175.59)
774,396	3,752.67	2,946.02	(21.50)	3,530.70	221.97	(584.68)
999,175	745.15	585.06	(21.48)	740.82	4.33	(155.76)
969,643	858.85	674.45	(21.47)	1,495.34	(636.49)	(820.90)
1,365,922	4,798.15	3,768.71	(21.45)	4,960.25	(162.10)	(1,191.54)
1,129,315	4,646.13	3,651.00	(21.42)	4,392.87	253.26	(741.88)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
864,039	863.69	678.71	(21.42)	960.62	(96.93)	(281.91)
616,142	6,341.94	4,983.73	(21.42)	5,827.95	513.98	(844.23)
620,828	1,177.29	925.44	(21.39)	1,068.84	108.45	(143.41)
358,280	3,039.70	2,389.96	(21.38)	2,909.20	130.49	(519.25)
378,190	6,631.50	5,214.16	(21.37)	5,994.25	637.25	(780.09)
855,120	5,524.09	4,343.62	(21.37)	5,064.36	459.73	(720.74)
237,005	2,955.47	2,323.92	(21.37)	2,881.77	73.70	(557.85)
262,359	1,084.10	852.50	(21.36)	1,435.38	(351.28)	(582.88)
1,123,086	6,300.32	4,954.47	(21.36)	5,854.11	446.21	(899.64)
239,234	1,018.35	800.81	(21.36)	1,111.57	(93.22)	(310.76)
860,031	777.13	611.26	(21.34)	859.47	(82.34)	(248.21)
1,107,059	737.72	580.37	(21.33)	719.01	18.70	(138.65)
491,717	1,123.18	883.83	(21.31)	1,051.95	71.22	(168.12)
93,418	4,808.78	3,784.23	(21.31)	4,557.97	250.81	(773.74)
430,585	3,480.31	2,739.37	(21.29)	3,159.18	321.12	(419.81)
1,388,000	8,708.05	6,854.37	(21.29)	8,745.22	(37.17)	(1,890.84)
924,812	1,023.81	805.94	(21.28)	1,230.02	(206.21)	(424.08)
198,943	5,901.93	4,646.06	(21.28)	5,333.98	567.95	(687.92)
881,301	5,215.02	4,106.67	(21.25)	5,124.78	90.23	(1,018.11)
30,729	4,196.01	3,304.57	(21.24)	3,903.27	292.74	(598.70)
1,126,855	7,406.54	5,833.44	(21.24)	7,209.04	197.50	(1,375.60)
1,210,316	577.53	454.94	(21.23)	814.87	(237.35)	(359.94)
1,378,656	972.77	766.41	(21.21)	1,168.74	(195.97)	(402.33)
1,158,328	5,819.11	4,585.31	(21.20)	5,630.15	188.97	(1,044.83)
1,132,388	947.40	746.74	(21.18)	1,483.74	(536.34)	(736.99)
123,464	6,874.18	5,418.78	(21.17)	6,229.34	644.85	(810.56)
1,404,539	3,844.60	3,030.93	(21.16)	3,622.34	222.26	(591.41)
364,822	7,558.43	5,958.98	(21.16)	6,815.09	743.34	(856.10)
146,141	6,110.63	4,817.82	(21.16)	5,466.84	643.79	(649.02)
585,049	2,907.45	2,293.06	(21.13)	2,714.93	192.52	(421.87)
507,754	931.41	734.64	(21.13)	941.92	(10.50)	(207.28)
1,305,951	921.68	727.05	(21.12)	1,013.58	(91.91)	(286.54)
932,028	1,081.44	853.10	(21.11)	1,216.79	(135.36)	(363.69)
925,011	8,287.91	6,538.82	(21.10)	7,513.55	774.36	(974.73)
1,407,595	4,499.20	3,549.92	(21.10)	4,269.71	229.49	(719.79)
1,407,596	4,387.28	3,461.63	(21.10)	4,278.73	108.55	(817.11)
832,060	946.14	746.60	(21.09)	1,323.52	(377.38)	(576.93)
276,716	854.61	674.41	(21.09)	950.90	(96.29)	(276.49)
31,854	975.94	770.36	(21.07)	1,379.30	(403.36)	(608.95)
333,143	904.06	713.68	(21.06)	1,140.64	(236.58)	(426.97)
1,086,527	1,019.04	804.67	(21.04)	1,454.73	(435.69)	(650.07)
222,796	1,017.09	803.33	(21.02)	1,188.47	(171.38)	(385.14)
621,707	3,979.04	3,143.04	(21.01)	4,039.64	(60.60)	(896.60)
504,559	499.16	394.34	(21.00)	496.63	2.53	(102.29)
1,206,401	7,249.71	5,727.72	(20.99)	6,854.18	395.53	(1,126.46)
1,097,787	3,146.76	2,486.39	(20.99)	2,907.30	239.46	(420.91)
521,738	4,155.63	3,284.03	(20.97)	4,159.12	(3.49)	(875.08)
143,937	1,191.92	941.95	(20.97)	1,389.57	(197.65)	(447.62)
320,112	887.08	701.12	(20.96)	933.49	(46.41)	(232.37)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
1,013,109	3,573.20	2,824.50	(20.95)	3,524.45	48.75	(699.95)
942,059	4,801.89	3,796.07	(20.95)	4,798.66	3.23	(1,002.59)
229,312	661.54	523.17	(20.92)	836.25	(174.71)	(313.08)
237,297	2,650.21	2,096.43	(20.90)	2,409.22	240.99	(312.79)
175,434	937.90	742.06	(20.88)	1,080.44	(142.54)	(338.38)
746,953	5,291.15	4,186.48	(20.88)	5,451.22	(160.08)	(1,264.74)
1,248,659	3,287.64	2,601.40	(20.87)	3,010.76	276.87	(409.36)
759,289	4,494.77	3,556.88	(20.87)	4,765.36	(270.59)	(1,208.48)
975,318	4,263.82	3,374.59	(20.86)	3,826.13	437.69	(451.54)
560,653	9,114.40	7,213.69	(20.85)	8,688.72	425.68	(1,475.04)
799,638	724.31	573.43	(20.83)	948.93	(224.62)	(375.50)
747,773	1,189.42	941.88	(20.81)	1,432.67	(243.25)	(490.80)
246,493	878.98	696.31	(20.78)	873.98	5.00	(177.68)
838,143	869.13	688.55	(20.78)	850.78	18.34	(162.24)
61,540	752.50	596.16	(20.78)	1,075.81	(323.31)	(479.66)
660,315	807.80	639.98	(20.78)	821.92	(14.12)	(181.95)
506,518	1,173.97	930.17	(20.77)	1,549.62	(375.65)	(619.46)
941,001	3,879.77	3,074.14	(20.76)	3,736.54	143.23	(662.40)
628,100	5,949.39	4,714.26	(20.76)	5,712.66	236.73	(998.40)
1,077,973	4,407.92	3,492.84	(20.76)	4,101.23	306.68	(608.39)
993,980	3,369.71	2,671.18	(20.73)	3,201.23	168.48	(530.04)
81,192	5,101.92	4,044.65	(20.72)	4,692.12	409.80	(647.48)
282,952	1,057.89	838.69	(20.72)	977.11	80.78	(138.41)
1,174,232	6,826.05	5,412.43	(20.71)	6,436.53	389.52	(1,024.09)
413,046	6,639.98	5,266.35	(20.69)	6,207.00	432.98	(940.65)
1,210,933	1,118.83	887.52	(20.67)	1,430.94	(312.11)	(543.42)
990,872	2,312.98	1,834.87	(20.67)	2,188.78	124.20	(353.91)
478,276	6,053.13	4,802.37	(20.66)	5,585.45	467.68	(783.08)
322,708	867.66	688.53	(20.65)	920.05	(52.39)	(231.53)
861,854	5,662.02	4,493.82	(20.63)	5,282.27	379.76	(788.45)
66,789	4,879.25	3,875.16	(20.58)	4,382.21	497.04	(507.05)
232,566	957.50	760.47	(20.58)	1,173.04	(215.54)	(412.57)
487,207	786.76	624.94	(20.57)	714.75	72.01	(89.81)
368,318	6,941.25	5,515.01	(20.55)	7,034.51	(93.26)	(1,519.50)
904,533	5,007.73	3,978.81	(20.55)	4,651.79	355.94	(672.98)
1,333,151	8,239.02	6,550.04	(20.50)	7,675.05	563.97	(1,125.01)
1,286,149	3,389.40	2,694.92	(20.49)	3,044.73	344.67	(349.82)
73,728	3,494.46	2,779.12	(20.47)	3,205.09	289.36	(425.97)
931,902	1,198.33	953.11	(20.46)	1,504.87	(306.54)	(551.76)
561,615	5,765.74	4,585.91	(20.46)	5,847.39	(81.66)	(1,261.48)
1,076,644	1,103.86	878.05	(20.46)	1,477.60	(373.74)	(599.55)
241,753	1,120.66	891.72	(20.43)	1,179.86	(59.19)	(288.14)
1,254,017	1,191.51	948.09	(20.43)	1,740.57	(549.06)	(792.48)
205,130	1,052.34	837.36	(20.43)	1,086.14	(33.80)	(248.78)
1,304,408	2,915.18	2,319.90	(20.42)	2,667.72	247.46	(347.82)
861,262	5,706.97	4,542.23	(20.41)	5,784.68	(77.70)	(1,242.45)
1,327,705	2,936.37	2,337.18	(20.41)	2,712.95	223.42	(375.77)
1,179,125	3,129.93	2,491.36	(20.40)	2,890.40	239.53	(399.04)
541,574	3,875.71	3,085.04	(20.40)	3,516.75	358.96	(431.71)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
584,936	794.40	632.77	(20.35)	860.75	(66.35)	(227.98)
350,299	937.92	747.17	(20.34)	1,426.95	(489.03)	(679.78)
1,143,296	765.27	609.77	(20.32)	1,160.75	(395.48)	(550.98)
579,472	7,374.81	5,876.69	(20.31)	6,651.55	723.26	(774.86)
410,792	1,073.25	855.25	(20.31)	1,271.82	(198.58)	(416.58)
333,231	5,904.33	4,705.77	(20.30)	5,676.54	227.79	(970.77)
177,407	5,015.43	3,997.62	(20.29)	4,893.29	122.14	(895.67)
706,104	5,857.96	4,671.67	(20.25)	5,905.27	(47.31)	(1,233.60)
1,039,574	7,569.51	6,036.97	(20.25)	8,262.74	(693.23)	(2,225.76)
1,331,912	2,082.12	1,660.75	(20.24)	1,928.87	153.24	(268.12)
1,267,617	1,113.41	888.31	(20.22)	1,107.82	5.59	(219.51)
25,760	6,595.05	5,262.73	(20.20)	6,343.97	251.08	(1,081.24)
176,114	2,987.48	2,384.06	(20.20)	2,734.29	253.19	(350.22)
1,227,461	4,618.45	3,686.07	(20.19)	4,612.47	5.98	(926.40)
502,259	2,063.08	1,646.60	(20.19)	2,005.34	57.73	(358.74)
397,314	1,017.74	812.44	(20.17)	1,451.50	(433.76)	(639.06)
584,230	2,653.88	2,118.91	(20.16)	2,589.50	64.38	(470.59)
730,868	5,614.13	4,482.68	(20.15)	5,468.03	146.10	(985.35)
1,358,888	601.22	480.07	(20.15)	1,043.46	(442.24)	(563.39)
345,426	4,688.13	3,744.00	(20.14)	4,225.52	462.60	(481.52)
244,986	901.72	720.21	(20.13)	1,787.27	(885.55)	(1,067.07)
1,130,685	976.61	780.08	(20.12)	1,157.10	(180.48)	(377.02)
177,766	2,379.94	1,901.42	(20.11)	2,268.64	111.30	(367.22)
280,721	4,224.17	3,374.86	(20.11)	3,902.50	321.66	(527.65)
1,180,954	2,861.18	2,286.62	(20.08)	2,768.71	92.47	(482.09)
109,388	5,475.89	4,377.15	(20.06)	5,523.50	(47.62)	(1,146.35)
1,058,254	1,184.30	946.75	(20.06)	1,725.22	(540.93)	(778.47)
1,271,827	5,360.43	4,285.51	(20.05)	4,909.84	450.59	(624.32)
1,396,934	4,319.52	3,454.59	(20.02)	4,326.26	(6.74)	(871.68)
766,071	2,551.65	2,040.79	(20.02)	2,391.57	160.08	(350.79)
1,197,665	995.01	795.85	(20.02)	989.97	5.05	(194.12)
268,333	5,273.28	4,217.94	(20.01)	4,816.83	456.45	(598.89)
100,564	1,165.91	932.62	(20.01)	1,509.44	(343.53)	(576.82)
690,645	4,741.83	3,793.26	(20.00)	4,281.29	460.54	(488.03)
400,671	1,145.22	916.43	(19.98)	1,390.78	(245.56)	(474.35)
773,075	6,928.85	5,544.92	(19.97)	7,304.20	(375.35)	(1,759.28)
626,217	4,642.49	3,717.44	(19.93)	4,331.30	311.19	(613.87)
966,147	2,200.22	1,761.91	(19.92)	2,171.76	28.46	(409.84)
702,970	1,148.07	919.82	(19.88)	1,668.96	(520.89)	(749.14)
1,140,908	4,842.66	3,880.79	(19.86)	4,718.89	123.77	(838.10)
402,995	9,009.93	7,220.84	(19.86)	8,386.31	623.62	(1,165.47)
61,986	2,908.25	2,330.76	(19.86)	2,877.72	30.53	(546.95)
374,282	14,521.45	11,641.62	(19.83)	13,187.81	1,333.64	(1,546.19)
425,404	850.75	682.26	(19.81)	1,129.92	(279.17)	(447.66)
650,804	885.51	710.17	(19.80)	1,046.02	(160.50)	(335.85)
423,474	1,189.47	954.11	(19.79)	1,273.66	(84.19)	(319.55)
1,082,379	572.42	459.17	(19.78)	575.25	(2.83)	(116.08)
1,168,855	1,163.72	933.83	(19.76)	1,760.84	(597.12)	(827.02)
282,537	1,089.82	874.90	(19.72)	1,552.62	(462.80)	(677.73)



**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
1,147,827	5,027.67	4,037.46	(19.70)	5,330.30	(302.64)	(1,292.84)
533,216	7,046.17	5,658.89	(19.69)	6,594.00	452.17	(935.12)
1,099,087	3,855.16	3,096.24	(19.69)	3,620.47	234.69	(524.23)
641,069	2,670.73	2,144.98	(19.69)	2,448.73	222.01	(303.75)
1,294,947	974.94	783.05	(19.68)	1,069.71	(94.77)	(286.67)
483,163	7,412.57	5,953.84	(19.68)	7,241.75	170.82	(1,287.92)
877,969	4,989.83	4,008.80	(19.66)	4,725.65	264.18	(716.84)
615,973	4,727.76	3,798.63	(19.65)	4,697.99	29.77	(899.36)
1,105,060	5,209.00	4,185.33	(19.65)	5,023.13	185.87	(837.80)
1,009,033	1,099.86	883.86	(19.64)	1,132.10	(32.25)	(248.24)
1,090,586	1,143.84	919.23	(19.64)	1,210.54	(66.70)	(291.31)
893,940	878.44	706.09	(19.62)	1,108.90	(230.46)	(402.81)
426,345	6,771.56	5,443.14	(19.62)	7,261.37	(489.81)	(1,818.23)
712,775	1,188.55	955.44	(19.61)	1,354.61	(166.06)	(399.16)
395,671	4,490.04	3,609.82	(19.60)	4,084.69	405.36	(474.87)
922,500	967.08	777.65	(19.59)	1,137.11	(170.03)	(359.46)
22,679	3,110.10	2,500.90	(19.59)	3,129.63	(19.54)	(628.73)
488,931	4,894.97	3,936.36	(19.58)	4,445.21	449.76	(508.85)
168,016	3,357.39	2,700.00	(19.58)	3,202.07	155.32	(502.07)
290,937	4,417.74	3,552.84	(19.58)	4,007.46	410.28	(454.62)
467,236	3,472.75	2,793.47	(19.56)	3,474.91	(2.16)	(681.44)
270,991	6,614.26	5,320.62	(19.56)	6,555.10	59.16	(1,234.48)
842,176	3,079.52	2,477.33	(19.55)	3,034.72	44.80	(557.38)
787,999	4,321.17	3,476.28	(19.55)	4,435.99	(114.81)	(959.70)
171,210	3,971.36	3,195.33	(19.54)	3,726.67	244.69	(531.34)
975,703	8,298.99	6,677.86	(19.53)	7,565.09	733.90	(887.22)
1,094,092	3,954.11	3,182.00	(19.53)	3,800.56	153.55	(618.56)
581,942	628.49	505.84	(19.52)	859.37	(230.88)	(353.53)
978,310	1,146.07	922.47	(19.51)	1,118.34	27.72	(195.87)
124,763	3,986.14	3,208.69	(19.50)	3,856.51	129.63	(647.82)
192,634	4,807.66	3,870.04	(19.50)	4,697.36	110.30	(827.32)
772,149	2,892.29	2,328.44	(19.49)	3,082.96	(190.67)	(754.52)
71,020	1,172.80	944.34	(19.48)	1,539.68	(366.88)	(595.35)
668,688	3,546.39	2,855.68	(19.48)	3,412.21	134.18	(556.53)
888,351	5,002.49	4,028.44	(19.47)	4,591.55	410.94	(563.11)
416,333	5,913.59	4,762.20	(19.47)	5,559.39	354.20	(797.19)
44,056	1,066.72	859.04	(19.47)	1,476.95	(410.23)	(617.91)
1,001,074	879.83	708.54	(19.47)	873.26	6.57	(164.72)
837,088	762.79	614.32	(19.46)	793.01	(30.22)	(178.69)
663,147	1,085.16	873.97	(19.46)	1,280.52	(195.36)	(406.55)
423,776	3,584.76	2,887.28	(19.46)	3,252.02	332.74	(364.74)
163,199	4,256.90	3,428.87	(19.45)	3,973.82	283.08	(544.95)
142,165	4,167.83	3,357.84	(19.43)	4,026.77	141.06	(668.93)
1,161,562	5,872.44	4,732.04	(19.42)	5,628.22	244.22	(896.18)
8,464	4,385.89	3,534.33	(19.42)	4,233.75	152.14	(699.42)
1,409,385	685.49	552.41	(19.41)	844.46	(158.97)	(292.04)
710,160	741.62	597.77	(19.40)	884.69	(143.07)	(286.92)
974,333	6,043.37	4,873.11	(19.36)	6,187.00	(143.62)	(1,313.88)
398,052	3,195.61	2,576.96	(19.36)	2,924.42	271.19	(347.46)



**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
211,980	4,515.70	3,641.75	(19.35)	4,802.57	(286.87)	(1,160.82)
801,877	1,076.60	868.30	(19.35)	1,291.07	(214.48)	(422.77)
1,293,118	3,271.62	2,638.66	(19.35)	3,056.11	215.51	(417.45)
750,742	6,564.97	5,295.75	(19.33)	6,394.76	170.21	(1,099.00)
389,497	5,201.66	4,197.31	(19.31)	4,710.21	491.45	(512.90)
274,263	3,176.73	2,563.39	(19.31)	2,950.44	226.29	(387.05)
1,161,563	3,997.16	3,225.42	(19.31)	3,811.92	185.24	(586.49)
1,085,910	4,611.92	3,721.77	(19.30)	4,276.86	335.06	(555.09)
518,011	10,887.90	8,786.73	(19.30)	10,973.41	(85.51)	(2,186.68)
243,881	1,008.41	813.81	(19.30)	1,081.70	(73.30)	(267.89)
201,901	5,784.99	4,669.26	(19.29)	5,524.90	260.09	(855.64)
798	1,157.67	934.40	(19.29)	1,065.09	92.58	(130.69)
852,747	1,109.10	895.49	(19.26)	1,369.78	(260.67)	(474.28)
12,990	9,588.21	7,742.03	(19.25)	9,682.70	(94.48)	(1,940.66)
569,661	5,077.14	4,099.56	(19.25)	4,596.12	481.02	(496.56)
88,857	1,068.43	862.74	(19.25)	1,321.93	(253.50)	(459.19)
105,334	4,179.64	3,375.09	(19.25)	3,825.29	354.35	(450.19)
475,786	3,228.11	2,607.27	(19.23)	3,095.41	132.71	(488.14)
995,852	3,068.61	2,478.64	(19.23)	3,149.93	(81.32)	(671.30)
1,205,341	727.16	587.38	(19.22)	903.94	(176.78)	(316.56)
815,423	2,049.36	1,655.95	(19.20)	1,998.99	50.36	(343.05)
1,193,388	3,215.26	2,598.12	(19.19)	2,970.31	244.95	(372.20)
179,821	2,121.93	1,714.65	(19.19)	2,424.45	(302.53)	(709.80)
353,325	2,773.88	2,241.55	(19.19)	2,846.45	(72.57)	(604.89)
501,804	1,071.78	866.13	(19.19)	1,262.22	(190.44)	(396.10)
430,996	4,082.58	3,299.24	(19.19)	3,707.58	375.01	(408.33)
804,136	6,649.97	5,374.25	(19.18)	10,420.74	(3,770.77)	(5,046.50)
303,106	4,962.06	4,010.51	(19.18)	4,535.96	426.11	(525.45)
876,409	866.46	700.33	(19.17)	1,191.01	(324.55)	(490.68)
388,323	4,888.05	3,951.97	(19.15)	4,472.95	415.10	(520.98)
172,663	1,147.92	928.33	(19.13)	1,857.78	(709.86)	(929.45)
244,565	3,471.89	2,807.82	(19.13)	3,163.86	308.03	(356.04)
1,295,059	3,134.63	2,535.08	(19.13)	2,958.16	176.47	(423.08)
357,871	4,638.61	3,751.70	(19.12)	4,429.11	209.50	(677.41)
22,573	885.70	716.36	(19.12)	994.40	(108.71)	(278.04)
773,901	1,134.17	917.57	(19.10)	1,366.92	(232.75)	(449.35)
743,789	2,782.67	2,251.59	(19.09)	2,554.00	228.68	(302.41)
629,411	4,353.60	3,523.13	(19.08)	4,150.96	202.64	(627.83)
892,986	5,084.99	4,116.80	(19.04)	4,711.81	373.18	(595.01)
651,763	2,821.00	2,284.20	(19.03)	2,728.72	92.28	(444.51)
1,020,690	1,099.96	890.82	(19.01)	1,711.75	(611.79)	(820.93)
581,193	5,739.25	4,649.28	(18.99)	5,469.99	269.26	(820.70)
401,424	3,460.52	2,803.68	(18.98)	3,188.36	272.15	(384.68)
25,953	2,839.80	2,300.87	(18.98)	2,991.82	(152.02)	(690.95)
621,067	2,893.92	2,345.32	(18.96)	2,660.48	233.44	(315.16)
196,021	2,940.29	2,382.90	(18.96)	3,027.67	(87.38)	(644.76)
353,511	1,013.73	821.58	(18.95)	1,383.66	(369.94)	(562.08)
906,135	2,782.64	2,255.23	(18.95)	2,552.99	229.65	(297.76)
1,298,916	1,144.81	927.83	(18.95)	1,137.44	7.37	(209.61)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
645,617	801.08	649.34	(18.94)	1,506.56	(705.48)	(857.22)
1,207,799	3,986.66	3,231.53	(18.94)	4,101.16	(114.50)	(869.63)
243,649	3,564.13	2,889.27	(18.93)	3,527.58	36.55	(638.31)
877,876	803.78	651.59	(18.93)	975.32	(171.54)	(323.73)
439,764	2,952.97	2,394.17	(18.92)	3,110.85	(157.88)	(716.68)
362,372	3,764.81	3,052.54	(18.92)	3,607.52	157.28	(554.98)
316,731	4,237.40	3,436.05	(18.91)	4,376.42	(139.02)	(940.37)
1,183,284	3,388.49	2,747.75	(18.91)	3,281.27	107.22	(533.51)
1,075,108	791.32	641.77	(18.90)	1,332.00	(540.68)	(690.23)
319,571	5,187.93	4,207.60	(18.90)	5,346.58	(158.65)	(1,138.98)
588,416	983.92	798.07	(18.89)	918.73	65.19	(120.66)
654,605	2,290.74	1,858.30	(18.88)	2,164.16	126.58	(305.86)
455,688	926.02	751.22	(18.88)	1,313.10	(387.08)	(561.88)
909,731	3,272.48	2,655.23	(18.86)	3,341.78	(69.30)	(686.54)
981,002	5,633.83	4,571.29	(18.86)	5,587.22	46.61	(1,015.93)
371,353	979.82	795.04	(18.86)	1,428.52	(448.70)	(633.48)
1,228,954	6,294.06	5,107.09	(18.86)	6,292.52	1.54	(1,185.43)
934,896	1,166.93	947.15	(18.83)	1,619.59	(452.66)	(672.44)
1,263,679	6,940.76	5,633.66	(18.83)	6,538.02	402.74	(904.36)
274,447	4,099.88	3,328.26	(18.82)	4,159.10	(59.22)	(830.84)
171,045	745.35	605.14	(18.81)	897.66	(152.31)	(292.52)
593,493	5,657.30	4,593.67	(18.80)	5,404.72	252.59	(811.04)
108,354	2,193.54	1,781.70	(18.77)	2,069.87	123.67	(288.17)
72,979	4,921.72	3,997.77	(18.77)	4,591.91	329.81	(594.15)
751,309	1,150.96	934.90	(18.77)	2,026.46	(875.50)	(1,091.56)
1,035,602	5,590.49	4,543.64	(18.73)	6,028.11	(437.62)	(1,484.47)
463,135	855.99	695.73	(18.72)	1,151.02	(295.03)	(455.29)
128,852	4,576.04	3,719.39	(18.72)	4,756.51	(180.47)	(1,037.12)
208,767	4,116.06	3,345.65	(18.72)	3,749.50	366.56	(403.85)
863,104	1,650.41	1,341.52	(18.72)	1,574.43	75.97	(232.91)
1,253,754	691.23	561.91	(18.71)	952.85	(261.62)	(390.94)
206,896	1,092.96	888.58	(18.70)	1,464.08	(371.12)	(575.50)
3,014	4,362.97	3,547.75	(18.69)	4,756.73	(393.75)	(1,208.98)
846,691	3,048.70	2,479.09	(18.68)	2,861.23	187.47	(382.14)
416,593	4,062.97	3,303.87	(18.68)	3,860.86	202.11	(556.99)
1,250,090	3,907.91	3,177.89	(18.68)	4,084.40	(176.49)	(906.51)
912,890	4,029.53	3,276.85	(18.68)	3,910.39	119.14	(633.54)
268,799	3,790.40	3,082.39	(18.68)	4,223.72	(433.33)	(1,141.33)
220,623	3,524.31	2,866.26	(18.67)	3,240.27	284.04	(374.00)
984,745	1,144.99	931.32	(18.66)	1,721.14	(576.15)	(789.82)
273,266	4,485.54	3,648.91	(18.65)	4,068.14	417.40	(419.23)
931,198	4,816.00	3,918.18	(18.64)	4,879.98	(63.98)	(961.79)
700,228	1,105.46	899.50	(18.63)	1,146.31	(40.85)	(246.82)
1,353,902	6,396.25	5,205.00	(18.62)	6,376.91	19.34	(1,171.91)
1,216,506	1,045.65	850.93	(18.62)	1,108.99	(63.34)	(258.06)
924,238	3,165.40	2,575.98	(18.62)	2,930.94	234.46	(354.96)
161,161	938.66	763.92	(18.62)	1,367.48	(428.82)	(603.56)
830,491	800.05	651.13	(18.61)	937.87	(137.82)	(286.74)
342,958	4,012.06	3,265.34	(18.61)	3,924.55	87.50	(659.21)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
849,569	3,431.06	2,792.49	(18.61)	3,359.88	71.18	(567.39)
1,127,314	1,109.46	903.02	(18.61)	1,551.51	(442.05)	(648.50)
599,535	6,209.57	5,054.14	(18.61)	5,667.16	542.41	(613.03)
1,273,665	664.09	540.56	(18.60)	878.04	(213.95)	(337.48)
1,045,515	1,009.54	821.79	(18.60)	1,545.12	(535.58)	(723.33)
732,137	4,135.51	3,366.69	(18.59)	3,756.55	378.95	(389.86)
1,224,551	3,240.82	2,638.91	(18.57)	3,306.75	(65.93)	(667.84)
682,330	727.71	592.57	(18.57)	865.68	(137.97)	(273.11)
1,089,049	6,383.36	5,198.06	(18.57)	6,620.47	(237.11)	(1,422.42)
366,231	2,480.88	2,020.95	(18.54)	2,282.54	198.34	(261.59)
458,044	950.03	774.02	(18.53)	1,118.59	(168.55)	(344.57)
841,946	1,056.06	860.42	(18.53)	1,158.02	(101.96)	(297.60)
101,734	1,128.01	919.09	(18.52)	1,266.12	(138.12)	(347.04)
1,110,711	5,021.14	4,091.53	(18.51)	4,869.32	151.81	(777.79)
340,645	3,635.29	2,963.49	(18.48)	3,634.22	1.07	(670.73)
909,460	910.46	742.34	(18.47)	1,613.88	(703.42)	(871.55)
462,444	996.69	812.86	(18.44)	1,193.38	(196.69)	(380.51)
1,115,443	4,243.75	3,461.41	(18.44)	4,015.85	227.90	(554.44)
1,113,706	951.97	776.68	(18.41)	1,493.48	(541.50)	(716.80)
530,363	1,037.44	846.41	(18.41)	1,517.61	(480.17)	(671.19)
79,075	804.99	656.79	(18.41)	806.59	(1.61)	(149.81)
578,683	6,015.15	4,908.25	(18.40)	6,497.96	(482.81)	(1,589.71)
449,960	8,474.81	6,916.29	(18.39)	8,215.66	259.15	(1,299.37)
778,690	1,016.57	829.62	(18.39)	1,434.78	(418.21)	(605.15)
822,787	6,550.74	5,346.82	(18.38)	6,194.45	356.29	(847.62)
728,759	3,564.46	2,909.46	(18.38)	3,375.83	188.63	(466.37)
525,197	2,766.52	2,258.28	(18.37)	2,564.46	202.06	(306.18)
938,406	2,339.57	1,909.96	(18.36)	2,215.69	123.88	(305.73)
665,734	3,038.31	2,481.61	(18.32)	2,862.72	175.58	(381.11)
977,071	4,389.86	3,585.82	(18.32)	4,028.98	360.88	(443.17)
681,696	958.96	783.41	(18.31)	1,201.56	(242.60)	(418.15)
840,160	2,991.63	2,444.23	(18.30)	2,788.47	203.16	(344.24)
680,305	3,584.55	2,929.50	(18.27)	3,406.15	178.40	(476.65)
429,074	4,149.62	3,391.45	(18.27)	4,540.31	(390.69)	(1,148.86)
1,179,857	4,169.63	3,407.94	(18.27)	3,901.08	268.55	(493.14)
837,446	3,935.67	3,216.89	(18.26)	3,884.40	51.27	(667.52)
1,060,597	1,037.94	848.59	(18.24)	1,196.64	(158.69)	(348.04)
397,234	4,352.79	3,559.03	(18.24)	4,461.17	(108.38)	(902.15)
1,171,208	5,360.58	4,383.16	(18.23)	5,025.53	335.05	(642.37)
222,382	3,002.55	2,455.27	(18.23)	2,850.43	152.12	(395.16)
926,393	3,892.64	3,183.38	(18.22)	3,769.84	122.80	(586.46)
751,438	650.59	532.05	(18.22)	1,051.01	(400.42)	(518.96)
712,863	4,418.14	3,613.16	(18.22)	4,129.99	288.15	(516.82)
1,038,333	699.63	572.19	(18.22)	922.09	(222.46)	(349.90)
1,294,653	1,073.51	877.99	(18.21)	1,625.45	(551.94)	(747.46)
94,209	3,008.90	2,461.47	(18.19)	2,849.92	158.99	(388.45)
126,811	2,793.02	2,285.40	(18.17)	2,831.65	(38.63)	(546.25)
260,970	4,253.35	3,480.40	(18.17)	4,229.20	24.15	(748.80)
214,628	832.70	681.44	(18.16)	972.33	(139.63)	(290.88)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
144,774	1,144.76	936.83	(18.16)	1,277.69	(132.93)	(340.86)
225,540	3,695.04	3,024.00	(18.16)	3,616.44	78.60	(592.43)
717,641	4,850.98	3,970.24	(18.16)	4,665.69	185.29	(695.45)
151,927	3,554.30	2,909.05	(18.15)	3,999.03	(444.73)	(1,089.98)
645,726	1,088.27	890.85	(18.14)	1,395.36	(307.10)	(504.51)
254,796	620.48	508.01	(18.13)	772.30	(151.82)	(264.29)
34,324	2,630.24	2,153.87	(18.11)	2,604.61	25.63	(450.74)
1,037,098	3,568.22	2,922.13	(18.11)	3,317.91	250.31	(395.78)
681,204	2,422.84	1,984.59	(18.09)	2,216.78	206.06	(232.19)
1,182,839	2,799.27	2,292.99	(18.09)	2,677.77	121.50	(384.78)
318,663	4,139.02	3,391.08	(18.07)	4,222.06	(83.03)	(830.98)
982,658	4,674.45	3,830.75	(18.05)	4,282.48	391.97	(451.73)
1,011,908	3,062.37	2,509.71	(18.05)	2,892.98	169.39	(383.28)
251,883	6,129.34	5,023.90	(18.04)	6,292.85	(163.51)	(1,268.95)
1,405,910	939.41	770.05	(18.03)	983.74	(44.33)	(213.70)
969,468	822.33	674.11	(18.02)	1,114.92	(292.59)	(440.81)
383,316	4,407.29	3,612.96	(18.02)	4,676.59	(269.31)	(1,063.63)
505,757	1,123.50	921.07	(18.02)	1,384.03	(260.52)	(462.96)
720,216	869.39	712.77	(18.01)	1,861.56	(992.16)	(1,148.79)
412,300	640.95	525.48	(18.01)	650.12	(9.17)	(124.64)
41,631	2,965.86	2,431.60	(18.01)	2,804.95	160.91	(373.36)
837,902	689.89	565.65	(18.01)	865.49	(175.59)	(299.84)
1,244,562	7,250.47	5,945.60	(18.00)	7,185.56	64.91	(1,239.96)
555,148	669.70	549.23	(17.99)	666.39	3.31	(117.16)
150,822	5,585.01	4,580.76	(17.98)	5,604.47	(19.46)	(1,023.71)
886,918	792.71	650.25	(17.97)	1,653.20	(860.49)	(1,002.95)
574,590	1,148.36	941.99	(17.97)	1,480.61	(332.24)	(538.62)
1,232,325	6,272.58	5,145.70	(17.97)	6,143.82	128.76	(998.12)
1,053,091	3,570.70	2,929.60	(17.95)	3,500.64	70.06	(571.05)
1,098,018	3,746.03	3,073.54	(17.95)	3,434.47	311.57	(360.92)
354,445	985.15	808.34	(17.95)	1,221.12	(235.98)	(412.79)
707,032	1,142.19	937.28	(17.94)	1,178.90	(36.72)	(241.62)
1,279,251	1,082.59	888.40	(17.94)	1,305.54	(222.94)	(417.14)
403,801	6,434.38	5,281.05	(17.92)	6,661.21	(226.82)	(1,380.15)
1,160,998	1,074.98	882.31	(17.92)	1,674.24	(599.25)	(791.93)
1,082,936	5,036.19	4,133.87	(17.92)	5,332.23	(296.04)	(1,198.36)
114,779	6,644.81	5,456.63	(17.88)	6,480.37	164.44	(1,023.74)
161,095	2,355.13	1,934.05	(17.88)	2,290.08	65.05	(356.03)
728,994	3,037.61	2,494.71	(17.87)	2,811.81	225.79	(317.11)
617,303	619.21	508.54	(17.87)	1,099.11	(479.90)	(590.56)
658,902	3,262.74	2,679.80	(17.87)	3,305.20	(42.47)	(625.40)
584,693	4,237.74	3,480.68	(17.86)	3,921.29	316.45	(440.61)
380,101	4,675.75	3,840.80	(17.86)	5,017.02	(341.26)	(1,176.22)
1,149,180	704.14	578.46	(17.85)	742.16	(38.02)	(163.70)
205,804	3,860.89	3,173.22	(17.81)	3,790.64	70.26	(617.42)
302,982	3,678.94	3,023.92	(17.80)	3,723.56	(44.62)	(699.64)
415,662	996.34	818.95	(17.80)	1,227.72	(231.38)	(408.77)
473,447	1,082.46	889.81	(17.80)	1,302.73	(220.27)	(412.93)
418,950	6,947.74	5,711.48	(17.79)	6,440.15	507.58	(728.67)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
670,831	3,959.09	3,254.98	(17.78)	4,085.59	(126.49)	(830.61)
358,705	5,458.24	4,487.89	(17.78)	4,984.68	473.56	(496.79)
658,795	1,824.54	1,500.31	(17.77)	1,674.86	149.68	(174.54)
1,135,606	2,968.51	2,441.29	(17.76)	3,462.98	(494.47)	(1,021.69)
834,751	6,027.44	4,959.64	(17.72)	5,693.72	333.72	(734.08)
483,764	5,222.50	4,298.46	(17.69)	5,588.06	(365.57)	(1,289.60)
808,455	3,589.27	2,954.28	(17.69)	3,764.19	(174.91)	(809.91)
11,761	3,677.04	3,027.95	(17.65)	3,610.96	66.08	(583.01)
897,294	1,162.84	957.70	(17.64)	1,569.42	(406.57)	(611.72)
790,328	1,107.92	912.48	(17.64)	2,246.50	(1,138.58)	(1,334.02)
39,741	3,776.25	3,110.18	(17.64)	3,753.23	23.01	(643.05)
816,496	5,113.89	4,212.28	(17.63)	5,019.21	94.68	(806.93)
805,055	4,943.11	4,071.86	(17.63)	4,869.13	73.97	(797.27)
981,724	5,728.65	4,719.31	(17.62)	5,565.65	163.00	(846.34)
615,683	4,420.28	3,641.47	(17.62)	4,602.96	(182.68)	(961.49)
849,648	3,553.00	2,927.02	(17.62)	3,349.88	203.12	(422.85)
946,370	1,076.78	887.33	(17.59)	2,036.25	(959.46)	(1,148.92)
501,993	3,445.99	2,839.83	(17.59)	3,501.72	(55.72)	(661.89)
787,927	7,764.50	6,400.19	(17.57)	7,472.47	292.04	(1,072.28)
260,373	3,506.05	2,890.12	(17.57)	3,758.23	(252.18)	(868.11)
295,015	3,773.80	3,110.98	(17.56)	3,811.10	(37.30)	(700.12)
1,296,295	3,515.01	2,898.37	(17.54)	3,418.61	96.40	(520.24)
177,760	960.14	791.73	(17.54)	1,451.24	(491.10)	(659.51)
237,200	4,757.54	3,923.27	(17.54)	4,737.12	20.43	(813.84)
492,014	5,829.82	4,807.75	(17.53)	5,465.08	364.74	(657.34)
501,514	4,269.09	3,520.67	(17.53)	4,181.00	88.10	(660.32)
393,827	3,732.23	3,078.02	(17.53)	3,523.55	208.68	(445.53)
1,124,760	4,004.94	3,303.01	(17.53)	3,858.65	146.30	(555.64)
938,470	4,757.29	3,923.72	(17.52)	4,412.53	344.77	(488.81)
933,898	941.83	777.01	(17.50)	1,475.35	(533.52)	(698.35)
1,203,685	3,337.79	2,753.73	(17.50)	3,106.94	230.85	(353.21)
156,408	4,844.05	3,996.76	(17.49)	4,752.49	91.56	(755.74)
1,255,618	1,081.68	892.55	(17.48)	1,234.08	(152.39)	(341.53)
1,024,971	3,433.23	2,833.05	(17.48)	3,291.15	142.08	(458.10)
692,435	3,749.65	3,094.17	(17.48)	3,436.57	313.08	(342.40)
789,134	5,304.98	4,377.86	(17.48)	4,943.14	361.85	(565.27)
997,064	904.56	746.53	(17.47)	1,009.89	(105.33)	(263.36)
136,429	900.65	743.50	(17.45)	1,185.37	(284.72)	(441.88)
101,789	4,387.57	3,622.03	(17.45)	4,529.66	(142.09)	(907.63)
155,727	2,853.40	2,355.77	(17.44)	2,769.24	84.16	(413.47)
716,578	5,245.58	4,331.06	(17.43)	5,216.46	29.12	(885.39)
586,492	959.80	792.60	(17.42)	984.49	(24.69)	(191.89)
760,638	3,705.11	3,059.76	(17.42)	3,405.60	299.51	(345.84)
959,601	4,213.92	3,480.39	(17.41)	3,881.46	332.47	(401.06)
827,813	2,285.58	1,888.06	(17.39)	2,125.77	159.81	(237.71)
888,578	1,155.87	954.87	(17.39)	1,434.51	(278.63)	(479.64)
1,114,235	4,879.16	4,031.44	(17.37)	4,671.31	207.85	(639.87)
288,600	1,823.80	1,506.94	(17.37)	1,784.94	38.86	(278.00)
629,903	5,235.68	4,326.28	(17.37)	4,826.70	408.98	(500.42)



**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
797,555	883.86	730.37	(17.37)	1,081.78	(197.93)	(351.41)
658,191	1,055.51	872.23	(17.36)	1,305.46	(249.95)	(433.23)
1,174,918	4,003.28	3,308.44	(17.36)	4,197.41	(194.13)	(888.97)
334,932	5,793.86	4,788.68	(17.35)	5,940.52	(146.65)	(1,151.83)
968,336	5,908.71	4,883.63	(17.35)	5,642.48	266.23	(758.85)
491,628	2,799.06	2,313.55	(17.35)	2,622.97	176.09	(309.42)
1,038,865	944.56	780.79	(17.34)	1,054.62	(110.06)	(273.83)
162,097	6,339.37	5,241.07	(17.32)	6,271.47	67.89	(1,030.40)
362,843	3,578.09	2,958.27	(17.32)	3,719.25	(141.16)	(760.98)
1,304,971	692.14	572.32	(17.31)	800.65	(108.52)	(228.33)
1,299,866	664.84	549.75	(17.31)	666.84	(2.00)	(117.09)
738,141	3,240.08	2,679.52	(17.30)	3,345.12	(105.04)	(665.61)
847,120	4,486.98	3,710.83	(17.30)	4,396.27	90.70	(685.44)
829,361	3,604.01	2,980.85	(17.29)	3,773.14	(169.14)	(792.30)
600,800	1,073.41	887.82	(17.29)	1,881.63	(808.23)	(993.81)
508,370	2,017.15	1,668.43	(17.29)	2,008.56	8.59	(340.13)
992,085	710.11	587.37	(17.28)	667.21	42.90	(79.84)
281,490	3,551.37	2,937.81	(17.28)	3,427.94	123.44	(490.13)
208,165	3,242.03	2,681.95	(17.28)	3,619.18	(377.15)	(937.23)
65,287	1,148.68	950.37	(17.26)	1,823.69	(675.01)	(873.33)
63,036	4,504.58	3,727.22	(17.26)	4,325.97	178.61	(598.75)
521,816	5,507.87	4,557.78	(17.25)	5,571.63	(63.76)	(1,013.84)
541,176	895.34	740.97	(17.24)	1,199.74	(304.40)	(458.77)
1,046,488	3,180.74	2,632.39	(17.24)	3,045.12	135.61	(412.74)
1,257,458	3,546.09	2,934.82	(17.24)	3,631.45	(85.36)	(696.62)
1,039,378	2,644.43	2,188.65	(17.24)	2,509.67	134.76	(321.02)
173,209	2,728.63	2,258.35	(17.24)	2,505.39	223.24	(247.04)
900,314	3,304.02	2,734.66	(17.23)	3,099.13	204.89	(364.47)
186,204	2,589.14	2,143.35	(17.22)	2,409.57	179.57	(266.22)
103,101	4,067.46	3,367.76	(17.20)	4,101.01	(33.55)	(733.26)
772,662	1,048.44	868.30	(17.18)	977.84	70.60	(109.54)
550,482	3,893.52	3,224.78	(17.18)	3,966.25	(72.72)	(741.46)
1,153,285	6,031.43	4,996.28	(17.16)	5,897.80	133.64	(901.52)
143,208	3,057.44	2,533.38	(17.14)	3,165.00	(107.56)	(631.63)
1,404,054	3,511.80	2,910.23	(17.13)	3,383.23	128.57	(473.00)
660,731	3,892.38	3,225.67	(17.13)	3,903.35	(10.97)	(677.68)
581,202	676.88	560.96	(17.13)	830.02	(153.14)	(269.06)
635,440	4,920.78	4,078.29	(17.12)	4,720.47	200.31	(642.18)
1,392,885	1,073.67	889.91	(17.12)	1,225.06	(151.39)	(335.15)
733,857	4,462.39	3,699.21	(17.10)	4,207.58	254.81	(508.37)
224,809	3,445.97	2,857.42	(17.08)	3,385.15	60.82	(527.73)
1,055,542	3,777.45	3,132.38	(17.08)	3,488.24	289.22	(355.86)
995,890	4,976.47	4,127.33	(17.06)	4,563.15	413.32	(435.82)
1,040,133	3,563.31	2,955.37	(17.06)	3,459.52	103.79	(504.15)
1,173,481	4,851.43	4,023.78	(17.06)	4,967.00	(115.57)	(943.22)
1,218,344	2,707.63	2,246.08	(17.05)	2,719.89	(12.26)	(473.80)
822,727	3,330.70	2,763.37	(17.03)	3,699.11	(368.41)	(935.74)
719,115	6,669.07	5,533.18	(17.03)	6,131.73	537.34	(598.56)
28,129	885.27	734.50	(17.03)	1,021.55	(136.28)	(287.05)



**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
743,924	9,458.20	7,848.10	(17.02)	8,812.79	645.40	(964.69)
1,294,793	986.12	818.33	(17.01)	1,449.00	(462.88)	(630.67)
215,260	8,848.83	7,343.28	(17.01)	8,428.42	420.41	(1,085.14)
851,336	3,641.95	3,022.31	(17.01)	3,786.80	(144.85)	(764.49)
317,601	1,059.13	878.95	(17.01)	2,279.42	(1,220.29)	(1,400.47)
124,442	3,108.35	2,579.96	(17.00)	3,090.39	17.96	(510.43)
1,190,890	2,876.60	2,387.66	(17.00)	2,849.72	26.88	(462.06)
1,025,961	970.08	805.22	(16.99)	945.36	24.72	(140.14)
743,902	8,037.09	6,671.26	(16.99)	7,703.89	333.20	(1,032.63)
1,171,862	3,964.55	3,290.88	(16.99)	3,920.10	44.45	(629.22)
593,265	4,497.60	3,733.36	(16.99)	4,454.14	43.46	(720.77)
1,105,698	1,065.96	884.85	(16.99)	1,245.80	(179.84)	(360.95)
921,745	3,782.47	3,139.86	(16.99)	3,954.84	(172.37)	(814.99)
663,810	781.98	649.17	(16.98)	1,362.79	(580.81)	(713.63)
585,442	4,513.65	3,747.05	(16.98)	4,143.31	370.34	(396.26)
826,688	2,991.06	2,483.46	(16.97)	2,981.19	9.87	(497.73)
239,717	887.53	737.00	(16.96)	1,083.14	(195.61)	(346.15)
666,551	4,192.80	3,481.73	(16.96)	4,197.25	(4.45)	(715.52)
1,400,623	2,945.64	2,446.14	(16.96)	3,026.37	(80.74)	(580.24)
544,222	3,508.84	2,914.02	(16.95)	3,265.68	243.16	(351.65)
429,549	813.73	675.81	(16.95)	1,181.33	(367.60)	(505.52)
695,491	1,084.54	900.76	(16.95)	1,137.09	(52.55)	(236.33)
432,703	4,446.21	3,693.22	(16.94)	4,542.07	(95.86)	(848.84)
179,528	5,936.72	4,931.44	(16.93)	5,715.32	221.40	(783.88)
840,691	893.33	742.17	(16.92)	1,041.34	(148.01)	(299.17)
502,416	829.79	689.38	(16.92)	1,028.10	(198.31)	(338.72)
1,077,039	3,411.66	2,834.38	(16.92)	3,476.12	(64.46)	(641.74)
76,987	2,486.81	2,066.04	(16.92)	2,420.17	66.65	(354.12)
1,143,436	6,074.35	5,047.06	(16.91)	5,592.88	481.48	(545.82)
576,810	4,709.48	3,913.19	(16.91)	4,848.73	(139.25)	(935.54)
456,290	3,127.60	2,598.91	(16.90)	3,247.39	(119.79)	(648.48)
483,954	964.38	801.37	(16.90)	1,303.64	(339.26)	(502.27)
1,004,012	3,157.56	2,624.05	(16.90)	3,183.55	(25.99)	(559.50)
1,151,746	837.96	696.43	(16.89)	1,053.62	(215.66)	(357.19)
1,094,356	7,416.38	6,163.97	(16.89)	8,043.01	(626.63)	(1,879.04)
1,199,535	4,279.68	3,557.15	(16.88)	4,107.44	172.25	(550.29)
136,970	3,649.46	3,033.71	(16.87)	3,662.78	(13.31)	(629.07)
579,272	3,144.74	2,614.70	(16.85)	2,916.04	228.70	(301.33)
764,364	4,256.66	3,539.50	(16.85)	3,917.98	338.68	(378.48)
523,042	3,828.78	3,183.92	(16.84)	3,905.41	(76.63)	(721.49)
39,237	4,279.66	3,558.89	(16.84)	4,144.12	135.54	(585.23)
681,367	1,080.85	898.89	(16.83)	2,326.59	(1,245.74)	(1,427.70)
1,117,449	5,340.98	4,441.93	(16.83)	5,330.31	10.67	(888.38)
1,035,358	3,354.84	2,790.27	(16.83)	3,318.69	36.15	(528.42)
834,431	2,854.46	2,374.16	(16.83)	2,981.08	(126.62)	(606.92)
22,808	3,567.78	2,967.58	(16.82)	3,439.90	127.88	(472.32)
1,274,489	4,210.19	3,501.95	(16.82)	4,178.52	31.67	(676.56)
735,367	2,163.02	1,799.71	(16.80)	2,325.52	(162.50)	(525.81)
280,103	2,826.83	2,352.04	(16.80)	2,594.85	231.98	(242.82)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
1,272,939	3,459.43	2,878.51	(16.79)	3,320.53	138.90	(442.02)
341,421	5,058.49	4,209.06	(16.79)	4,775.98	282.51	(566.92)
993,468	3,656.40	3,042.48	(16.79)	6,376.65	(2,720.25)	(3,334.17)
1,217,948	2,369.32	1,971.52	(16.79)	2,385.14	(15.82)	(413.62)
1,030,887	4,648.38	3,868.48	(16.78)	4,605.76	42.62	(737.27)
785,515	1,062.00	884.09	(16.75)	1,322.23	(260.23)	(438.14)
1,147,344	2,303.64	1,917.73	(16.75)	2,215.32	88.32	(297.59)
1,286,117	4,596.88	3,827.17	(16.74)	4,355.03	241.85	(527.87)
660,156	3,708.06	3,087.33	(16.74)	3,612.63	95.43	(525.30)
1,030,462	4,000.95	3,331.38	(16.74)	3,730.21	270.75	(398.83)
725,188	5,347.22	4,453.39	(16.72)	4,906.17	441.05	(452.78)
1,409,652	4,634.74	3,860.47	(16.71)	4,362.46	272.28	(502.00)
194,258	3,257.15	2,713.29	(16.70)	3,322.48	(65.33)	(609.19)
1,197,135	6,040.22	5,031.91	(16.69)	6,237.60	(197.38)	(1,205.69)
740,475	3,210.87	2,674.97	(16.69)	3,036.37	174.50	(361.39)
706,991	1,077.86	897.97	(16.69)	1,542.26	(464.40)	(644.29)
709,133	5,659.72	4,715.83	(16.68)	5,709.40	(49.68)	(993.58)
1,308,838	3,518.33	2,931.77	(16.67)	3,482.75	35.58	(550.98)
343,639	992.68	827.20	(16.67)	1,359.59	(366.90)	(532.39)
1,074,167	3,281.86	2,734.77	(16.67)	3,200.26	81.60	(465.48)
1,149,956	2,669.71	2,224.81	(16.66)	2,513.17	156.54	(288.36)
242,630	7,822.97	6,519.65	(16.66)	7,216.11	606.86	(696.47)
26,212	2,510.72	2,092.60	(16.65)	3,056.34	(545.62)	(963.74)
180,138	4,497.93	3,749.19	(16.65)	4,605.21	(107.28)	(856.02)
1,003,239	3,589.27	2,991.83	(16.65)	3,581.70	7.57	(589.87)
974,277	843.86	703.41	(16.64)	1,506.39	(662.52)	(802.98)
674,247	3,890.73	3,243.25	(16.64)	3,935.35	(44.62)	(692.10)
509,113	941.45	784.83	(16.64)	1,280.83	(339.38)	(496.00)
731,633	4,474.96	3,730.57	(16.63)	4,711.54	(236.58)	(980.97)
210,046	2,315.05	1,930.04	(16.63)	2,352.35	(37.30)	(422.31)
1,308,800	3,458.14	2,883.08	(16.63)	3,632.30	(174.16)	(749.22)
1,392,798	4,338.91	3,617.62	(16.62)	4,642.26	(303.34)	(1,024.64)
512,447	4,667.73	3,892.60	(16.61)	4,726.79	(59.06)	(834.19)
615,003	4,095.04	3,415.55	(16.59)	3,854.98	240.06	(439.43)
698,291	4,453.33	3,715.00	(16.58)	4,307.33	146.00	(592.33)
653,850	972.08	810.92	(16.58)	964.31	7.76	(153.39)
382,392	2,271.65	1,895.15	(16.57)	2,142.99	128.66	(247.85)
380,198	5,302.49	4,423.70	(16.57)	5,221.22	81.27	(797.52)
683,858	4,128.05	3,444.01	(16.57)	4,142.42	(14.38)	(698.41)
805,491	894.22	746.07	(16.57)	975.01	(80.79)	(228.94)
620,685	3,862.89	3,223.09	(16.56)	3,684.01	178.88	(460.92)
1,053,108	2,884.68	2,407.19	(16.55)	2,829.43	55.25	(422.23)
554,945	888.68	741.70	(16.54)	848.15	40.52	(106.45)
1,053,084	2,573.90	2,148.45	(16.53)	2,592.82	(18.91)	(444.37)
1,174,647	2,826.40	2,359.32	(16.53)	2,916.83	(90.43)	(557.51)
1,283,795	1,143.33	954.42	(16.52)	1,294.38	(151.06)	(339.97)
232,400	5,584.82	4,662.08	(16.52)	5,435.78	149.03	(773.70)
295,663	3,342.37	2,790.39	(16.51)	3,461.40	(119.03)	(671.01)
66,448	885.45	739.27	(16.51)	831.50	53.94	(92.23)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
584,603	3,108.29	2,595.17	(16.51)	3,112.02	(3.73)	(516.85)
680,159	5,502.56	4,594.42	(16.50)	5,069.91	432.65	(475.48)
1,349,520	3,956.43	3,304.13	(16.49)	3,861.31	95.12	(557.17)
275,009	3,125.58	2,610.37	(16.48)	2,888.61	236.97	(278.23)
1,409,829	6,282.31	5,248.58	(16.45)	5,848.51	433.80	(599.93)
508,417	1,017.74	850.31	(16.45)	1,505.86	(488.12)	(655.55)
1,057,598	5,310.68	4,437.01	(16.45)	5,222.12	88.56	(785.11)
1,136,765	3,005.93	2,511.45	(16.45)	2,826.17	179.77	(314.72)
1,017,778	3,088.76	2,580.69	(16.45)	2,880.79	207.97	(300.10)
1,069,680	4,165.53	3,480.80	(16.44)	4,363.64	(198.11)	(882.85)
1,281,348	743.15	621.00	(16.44)	1,126.11	(382.96)	(505.11)
733,727	2,719.90	2,273.02	(16.43)	2,500.96	218.94	(227.95)
1,167,239	780.08	651.95	(16.43)	769.42	10.66	(117.47)
1,060,651	2,567.27	2,145.76	(16.42)	2,428.77	138.49	(283.02)
1,310,755	3,656.90	3,056.51	(16.42)	3,643.94	12.96	(587.43)
507,464	2,436.13	2,036.29	(16.41)	2,312.99	123.13	(276.70)
280,503	861.85	720.40	(16.41)	1,107.93	(246.08)	(387.53)
721,539	5,351.24	4,473.27	(16.41)	5,713.78	(362.54)	(1,240.51)
380,316	4,644.12	3,882.83	(16.39)	5,222.04	(577.91)	(1,339.20)
967,165	9,224.63	7,714.48	(16.37)	8,513.55	711.08	(799.07)
332,529	2,871.81	2,401.67	(16.37)	2,851.01	20.80	(449.34)
289,882	3,558.82	2,976.40	(16.37)	3,369.74	189.08	(393.33)
677,443	2,486.44	2,079.72	(16.36)	2,610.63	(124.19)	(530.91)
1,102,738	3,447.38	2,883.55	(16.36)	3,358.07	89.31	(474.52)
75,208	8,502.98	7,113.09	(16.35)	8,947.56	(444.59)	(1,834.48)
974,832	6,254.17	5,232.43	(16.34)	6,157.80	96.36	(925.37)
989,402	824.38	689.71	(16.34)	1,065.54	(241.16)	(375.83)
367,655	3,372.49	2,821.69	(16.33)	3,187.34	185.14	(365.66)
850,133	938.38	785.14	(16.33)	1,323.74	(385.36)	(538.60)
1,122,332	2,837.65	2,374.31	(16.33)	2,679.10	158.55	(304.79)
1,092,879	4,706.87	3,938.42	(16.33)	4,610.29	96.58	(671.86)
509,064	5,141.31	4,301.94	(16.33)	4,859.18	282.14	(557.23)
1,254,881	4,014.38	3,359.30	(16.32)	4,173.75	(159.37)	(814.45)
983,474	3,057.18	2,558.36	(16.32)	2,844.48	212.70	(286.11)
816,825	4,296.67	3,596.13	(16.30)	4,295.00	1.67	(698.87)
114,859	3,846.55	3,219.42	(16.30)	3,582.29	264.26	(362.87)
1,327,599	557.41	466.54	(16.30)	623.01	(65.60)	(156.47)
169,589	980.18	820.72	(16.27)	1,004.47	(24.29)	(183.75)
551,193	2,191.20	1,834.86	(16.26)	2,122.99	68.21	(288.13)
533,425	6,169.45	5,166.69	(16.25)	5,938.93	230.53	(772.24)
226,210	3,364.35	2,817.52	(16.25)	3,177.23	187.12	(359.71)
114,244	920.19	770.71	(16.24)	900.53	19.66	(129.82)
1,415,312	743.29	622.56	(16.24)	819.63	(76.34)	(197.07)
1,384,108	800.88	670.85	(16.23)	968.79	(167.92)	(297.94)
1,071,611	3,495.30	2,928.13	(16.23)	3,396.75	98.55	(468.62)
955,409	4,255.05	3,564.70	(16.22)	4,245.68	9.37	(680.98)
671,013	2,282.40	1,912.19	(16.22)	2,277.75	4.65	(365.56)
938,000	993.42	832.31	(16.22)	1,225.60	(232.18)	(393.30)
1,081,730	3,417.06	2,862.97	(16.22)	3,180.78	236.27	(317.81)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
748,731	3,722.48	3,118.88	(16.21)	4,017.00	(294.52)	(898.12)
126,075	4,500.76	3,771.76	(16.20)	4,298.74	202.01	(526.98)
1,264,433	3,353.08	2,810.03	(16.20)	3,292.56	60.53	(482.53)
40,830	939.29	787.18	(16.19)	889.20	50.09	(102.03)
355,986	1,029.86	863.09	(16.19)	1,314.40	(284.54)	(451.31)
1,188,442	4,041.92	3,387.53	(16.19)	3,843.83	198.09	(456.30)
1,172,911	1,133.19	949.83	(16.18)	1,775.97	(642.78)	(826.15)
152,627	5,722.19	4,796.61	(16.18)	5,908.56	(186.37)	(1,111.94)
10,356	5,626.35	4,716.59	(16.17)	5,229.03	397.32	(512.43)
785,057	4,557.74	3,820.99	(16.16)	4,371.94	185.79	(550.96)
545,551	3,924.36	3,290.11	(16.16)	4,414.38	(490.02)	(1,124.27)
772,369	7,712.41	6,466.28	(16.16)	8,219.62	(507.20)	(1,753.34)
1,147,637	5,255.00	4,406.67	(16.14)	5,558.13	(303.13)	(1,151.46)
531,064	3,473.09	2,912.53	(16.14)	3,385.22	87.86	(472.70)
1,236,422	2,114.92	1,773.75	(16.13)	2,154.05	(39.14)	(380.31)
957,597	3,087.30	2,589.35	(16.13)	3,123.62	(36.33)	(534.27)
1,152,886	844.42	708.25	(16.13)	921.71	(77.29)	(213.46)
98,187	3,331.18	2,794.12	(16.12)	3,153.99	177.18	(359.87)
364,017	3,987.23	3,344.55	(16.12)	3,751.20	236.03	(406.65)
880,639	4,634.45	3,887.67	(16.11)	4,826.57	(192.12)	(938.91)
979,866	2,839.87	2,382.37	(16.11)	3,004.25	(164.38)	(621.89)
372,988	6,833.62	5,732.77	(16.11)	6,844.56	(10.93)	(1,111.79)
260,147	5,883.28	4,935.91	(16.10)	6,046.96	(163.68)	(1,111.05)
515,689	2,503.21	2,100.33	(16.09)	2,419.71	83.51	(319.38)
607,221	3,597.67	3,018.84	(16.09)	3,365.87	231.80	(347.03)
565,776	885.76	743.25	(16.09)	1,302.43	(416.68)	(559.18)
1,407,509	1,614.37	1,354.77	(16.08)	1,913.38	(299.01)	(558.61)
582,167	3,305.89	2,774.51	(16.07)	3,089.94	215.95	(315.43)
1,006,918	3,365.63	2,825.42	(16.05)	3,293.52	72.11	(468.10)
591,892	3,723.37	3,125.95	(16.05)	3,529.71	193.66	(403.76)
1,369,295	1,093.82	918.39	(16.04)	1,186.02	(92.20)	(267.64)
174,551	4,557.62	3,826.76	(16.04)	4,785.77	(228.14)	(959.01)
612,410	3,221.67	2,705.15	(16.03)	3,065.63	156.04	(360.48)
1,058,180	2,187.52	1,836.80	(16.03)	2,068.90	118.62	(232.10)
62,361	2,453.30	2,060.17	(16.02)	2,597.38	(144.08)	(537.21)
241,138	923.64	775.73	(16.01)	1,204.71	(281.07)	(428.98)
385,701	2,504.18	2,103.23	(16.01)	2,435.99	68.18	(332.76)
139,758	823.47	691.67	(16.01)	1,181.42	(357.95)	(489.75)
739,157	4,105.86	3,448.86	(16.00)	4,163.98	(58.12)	(715.12)
40,053	3,419.21	2,872.22	(16.00)	3,172.91	246.31	(300.68)
543,053	819.79	688.74	(15.99)	1,097.25	(277.46)	(408.51)
904,569	4,737.83	3,980.65	(15.98)	4,610.58	127.24	(629.93)
843,241	3,086.92	2,593.97	(15.97)	3,122.91	(35.99)	(528.94)
1,146,440	4,572.65	3,842.74	(15.96)	4,578.67	(6.02)	(735.94)
1,095,356	4,758.02	3,999.02	(15.95)	4,532.67	225.35	(533.65)
958,919	2,554.27	2,147.02	(15.94)	2,553.97	0.29	(406.96)
943,808	3,916.55	3,292.24	(15.94)	3,916.28	0.27	(624.04)
139,943	3,732.98	3,138.16	(15.93)	3,536.70	196.28	(398.54)
108,057	5,530.21	4,649.76	(15.92)	5,488.49	41.72	(838.73)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
715,578	1,135.26	954.55	(15.92)	1,113.05	22.21	(158.49)
742,399	6,642.80	5,585.48	(15.92)	7,104.45	(461.65)	(1,518.97)
1,296,265	4,412.44	3,710.25	(15.91)	4,351.41	61.04	(641.16)
963,648	4,085.04	3,435.09	(15.91)	4,186.28	(101.24)	(751.18)
1,292,713	891.33	749.57	(15.90)	1,195.53	(304.21)	(445.96)
726,872	4,521.37	3,802.34	(15.90)	4,630.87	(109.50)	(828.53)
334,229	4,076.63	3,428.78	(15.89)	3,993.33	83.30	(564.55)
879,791	2,887.18	2,428.40	(15.89)	3,323.16	(435.97)	(894.76)
1,288,271	4,194.03	3,527.63	(15.89)	4,250.31	(56.28)	(722.69)
527,552	695.65	585.12	(15.89)	671.41	24.24	(86.29)
158,736	754.49	634.62	(15.89)	1,403.96	(649.47)	(769.34)
434,423	800.87	673.68	(15.88)	1,231.47	(430.60)	(557.78)
106,495	5,395.33	4,539.21	(15.87)	5,239.95	155.37	(700.74)
93,640	2,012.14	1,693.00	(15.86)	1,888.51	123.63	(195.52)
244,782	4,250.19	3,576.22	(15.86)	4,418.66	(168.48)	(842.44)
641,838	6,404.13	5,388.93	(15.85)	6,203.84	200.29	(814.91)
981,359	5,439.85	4,577.82	(15.85)	6,200.21	(760.35)	(1,622.39)
913,649	3,574.82	3,008.35	(15.85)	3,420.93	153.89	(412.58)
1,089,687	3,267.16	2,749.87	(15.83)	3,473.91	(206.75)	(724.04)
121,129	2,989.71	2,516.40	(15.83)	3,183.37	(193.66)	(666.97)
402,392	2,118.19	1,782.95	(15.83)	1,968.54	149.65	(185.59)
40,398	3,086.87	2,598.38	(15.82)	2,933.22	153.65	(334.84)
520,663	806.18	678.61	(15.82)	1,015.45	(209.27)	(336.84)
1,227,459	4,072.29	3,428.40	(15.81)	4,389.31	(317.02)	(960.91)
251,046	4,322.12	3,638.73	(15.81)	4,221.19	100.93	(582.46)
49,319	3,433.71	2,891.14	(15.80)	3,658.43	(224.72)	(767.29)
768,105	2,231.20	1,878.72	(15.80)	2,220.71	10.49	(341.99)
929,079	2,509.63	2,113.20	(15.80)	2,680.13	(170.50)	(566.93)
477,253	3,390.34	2,854.89	(15.79)	3,216.76	173.59	(361.87)
958,861	2,516.64	2,119.44	(15.78)	2,426.06	90.58	(306.62)
818,314	948.36	798.72	(15.78)	1,174.67	(226.31)	(375.95)
523,160	2,767.63	2,331.16	(15.77)	2,672.59	95.04	(341.43)
595,224	975.54	821.69	(15.77)	1,154.60	(179.06)	(332.91)
1,298,790	5,215.05	4,393.51	(15.75)	5,494.85	(279.80)	(1,101.34)
369,762	3,909.49	3,294.11	(15.74)	3,650.67	258.81	(356.57)
1,403,883	5,283.85	4,452.16	(15.74)	5,385.90	(102.05)	(933.73)
595,061	2,762.98	2,328.09	(15.74)	3,023.79	(260.81)	(695.70)
278,069	4,415.31	3,720.37	(15.74)	4,354.24	61.08	(633.87)
656,914	1,035.35	872.52	(15.73)	1,306.52	(271.17)	(434.00)
997,548	4,280.11	3,607.21	(15.72)	4,047.19	232.92	(439.99)
251,006	2,494.15	2,102.28	(15.71)	2,633.85	(139.70)	(531.56)
926,005	3,048.23	2,569.31	(15.71)	2,844.30	203.93	(274.99)
1,179,334	2,753.49	2,320.96	(15.71)	2,632.26	121.22	(311.31)
533,762	2,999.86	2,528.74	(15.70)	3,135.01	(135.15)	(606.27)
45,564	5,275.93	4,447.40	(15.70)	5,087.15	188.78	(639.75)
1,288,269	3,744.50	3,156.57	(15.70)	3,857.36	(112.86)	(700.79)
719,019	2,987.06	2,518.52	(15.69)	2,867.77	119.29	(349.25)
281,476	3,247.26	2,738.52	(15.67)	3,311.20	(63.93)	(572.68)
742,130	3,395.43	2,863.48	(15.67)	3,338.11	57.33	(474.62)



**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
671,782	3,257.53	2,747.24	(15.66)	3,239.90	17.63	(492.67)
769,362	2,625.73	2,214.55	(15.66)	2,758.66	(132.93)	(544.11)
975,261	4,108.55	3,465.27	(15.66)	3,987.08	121.47	(521.81)
431,605	2,896.99	2,443.49	(15.65)	2,879.79	17.21	(436.29)
400,915	3,822.18	3,223.87	(15.65)	3,996.45	(174.27)	(772.58)
1,199,928	3,140.81	2,649.34	(15.65)	3,245.42	(104.61)	(596.08)
317,549	5,394.38	4,550.72	(15.64)	5,544.61	(150.22)	(993.89)
377,843	3,608.97	3,044.77	(15.63)	3,384.86	224.10	(340.09)
1,369,745	1,071.89	904.32	(15.63)	1,217.85	(145.96)	(313.53)
612,568	4,060.48	3,426.91	(15.60)	3,871.11	189.38	(444.19)
451,354	3,297.21	2,782.75	(15.60)	3,390.79	(93.58)	(608.04)
544,268	2,923.79	2,467.75	(15.60)	2,706.11	217.67	(238.36)
264,119	2,270.37	1,916.31	(15.59)	2,223.15	47.22	(306.85)
204,123	4,288.29	3,619.82	(15.59)	4,678.03	(389.74)	(1,058.22)
653,731	4,281.88	3,614.87	(15.58)	4,039.51	242.38	(424.64)
730,023	826.14	697.46	(15.58)	1,347.69	(521.55)	(650.23)
1,069,464	3,629.48	3,064.40	(15.57)	4,059.59	(430.10)	(995.19)
1,101,086	6,383.16	5,389.68	(15.56)	6,420.52	(37.36)	(1,030.83)
941,699	6,030.60	5,092.11	(15.56)	5,893.03	137.57	(800.91)
349,085	3,055.20	2,580.09	(15.55)	3,428.74	(373.54)	(848.65)
1,396,047	5,185.41	4,379.09	(15.55)	4,838.03	347.38	(458.93)
973,285	4,430.99	3,742.47	(15.54)	4,229.36	201.63	(486.89)
22,240	3,505.16	2,960.62	(15.54)	3,339.83	165.33	(379.21)
469,317	2,114.13	1,785.73	(15.53)	2,188.09	(73.96)	(402.36)
915,594	2,202.53	1,860.42	(15.53)	2,052.92	149.62	(192.49)
1,189,921	1,960.81	1,656.27	(15.53)	1,930.77	30.04	(274.50)
350,652	3,187.04	2,692.06	(15.53)	3,185.42	1.63	(493.36)
582,047	5,306.08	4,482.12	(15.53)	4,972.22	333.86	(490.10)
1,107,735	3,429.62	2,897.06	(15.53)	3,394.13	35.49	(497.07)
705,885	4,132.11	3,490.52	(15.53)	4,015.05	117.06	(524.53)
782,484	1,027.03	867.74	(15.51)	1,250.57	(223.54)	(382.83)
573,115	2,418.60	2,043.56	(15.51)	2,437.57	(18.97)	(394.00)
877,739	2,665.64	2,252.49	(15.50)	2,779.73	(114.08)	(527.24)
695,144	2,112.99	1,785.52	(15.50)	2,061.07	51.91	(275.56)
679,631	1,010.53	853.92	(15.50)	1,520.28	(509.75)	(666.35)
112,370	4,219.30	3,565.49	(15.50)	4,291.67	(72.38)	(726.18)
142,317	6,207.52	5,246.31	(15.48)	6,187.62	19.90	(941.30)
1,001,334	3,191.95	2,697.77	(15.48)	3,182.84	9.11	(485.07)
203,457	690.80	583.92	(15.47)	1,092.40	(401.60)	(508.48)
930,072	3,916.37	3,310.72	(15.46)	4,130.21	(213.84)	(819.50)
1,183,676	1,121.87	948.48	(15.46)	1,248.87	(127.00)	(300.39)
956,424	1,116.59	944.02	(15.46)	1,448.32	(331.73)	(504.30)
633,956	4,673.71	3,951.77	(15.45)	4,700.37	(26.66)	(748.60)
290,606	2,581.04	2,182.38	(15.45)	2,603.83	(22.79)	(421.45)
144,184	3,898.45	3,296.32	(15.45)	4,416.88	(518.43)	(1,120.55)
916,687	4,335.14	3,665.66	(15.44)	4,663.93	(328.78)	(998.27)
555,402	5,212.55	4,407.83	(15.44)	4,872.97	339.57	(465.14)
625,260	863.32	730.05	(15.44)	934.45	(71.13)	(204.40)
103,999	3,696.33	3,125.84	(15.43)	3,809.63	(113.30)	(683.79)



**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
250,726	3,423.79	2,895.39	(15.43)	3,362.99	60.80	(467.61)
873,004	1,038.06	878.05	(15.42)	1,585.15	(547.08)	(707.10)
174,018	3,236.36	2,737.49	(15.41)	3,218.71	17.65	(481.23)
1,040,938	4,689.91	3,967.31	(15.41)	4,631.39	58.52	(664.09)
615,311	5,625.62	4,760.28	(15.38)	5,224.34	401.28	(464.06)
297,549	4,097.60	3,467.50	(15.38)	4,013.70	83.90	(546.20)
5,941	779.13	659.32	(15.38)	1,415.27	(636.14)	(755.95)
1,110,387	2,873.11	2,431.33	(15.38)	2,767.58	105.54	(336.25)
135,278	981.37	830.47	(15.38)	1,578.40	(597.03)	(747.92)
1,375,131	6,775.78	5,733.97	(15.38)	7,237.86	(462.07)	(1,503.88)
1,070,240	3,938.62	3,333.07	(15.37)	3,706.22	232.39	(373.16)
1,110,188	2,388.35	2,021.33	(15.37)	2,483.93	(95.58)	(462.60)
689,243	3,515.55	2,975.33	(15.37)	3,266.18	249.37	(290.85)
1,226,044	1,054.16	892.18	(15.37)	1,415.32	(361.17)	(523.14)
669,598	4,316.57	3,653.52	(15.36)	4,376.87	(60.30)	(723.35)
380,073	5,279.42	4,468.89	(15.35)	5,472.01	(192.59)	(1,003.12)
1,060,931	3,461.80	2,930.48	(15.35)	3,340.93	120.87	(410.45)
1,228,001	3,209.19	2,716.85	(15.34)	3,494.29	(285.10)	(777.44)
850,949	2,591.76	2,194.15	(15.34)	2,488.71	103.05	(294.56)
626,516	3,824.38	3,238.04	(15.33)	3,712.50	111.88	(474.46)
508,487	2,364.95	2,002.39	(15.33)	2,441.87	(76.92)	(439.47)
737,955	3,161.32	2,676.82	(15.33)	2,979.62	181.70	(302.80)
657,858	756.08	640.22	(15.32)	1,149.73	(393.65)	(509.51)
434,011	902.53	764.27	(15.32)	1,145.22	(242.69)	(380.95)
98,986	4,318.68	3,657.15	(15.32)	4,178.54	140.14	(521.39)
1,122,361	3,792.59	3,212.13	(15.30)	3,814.07	(21.48)	(601.94)
796,009	4,203.44	3,560.12	(15.30)	4,385.00	(181.56)	(824.88)
113,741	4,303.00	3,645.17	(15.29)	5,233.98	(930.98)	(1,588.81)
1,289,215	3,637.25	3,081.52	(15.28)	3,857.82	(220.56)	(776.30)
342,955	4,364.75	3,697.89	(15.28)	4,232.25	132.49	(534.37)
1,110,609	2,859.84	2,423.21	(15.27)	2,877.23	(17.39)	(454.02)
903,088	3,676.30	3,115.05	(15.27)	3,802.62	(126.32)	(687.57)
812,197	2,451.57	2,077.42	(15.26)	2,301.44	150.13	(224.02)
313,995	2,274.78	1,927.85	(15.25)	2,476.05	(201.27)	(548.20)
457,517	3,409.77	2,889.84	(15.25)	3,342.31	67.46	(452.47)
1,114,608	3,978.72	3,372.28	(15.24)	4,309.87	(331.15)	(937.60)
1,149,312	4,145.12	3,513.74	(15.23)	4,334.67	(189.56)	(820.93)
1,040,541	2,217.16	1,879.45	(15.23)	2,236.16	(19.00)	(356.70)
881,843	3,126.04	2,650.09	(15.23)	3,083.46	42.58	(433.37)
625,180	1,100.60	933.06	(15.22)	1,423.81	(323.21)	(490.75)
937,418	5,323.45	4,513.44	(15.22)	5,507.10	(183.65)	(993.66)
779,137	5,626.78	4,770.76	(15.21)	6,156.62	(529.84)	(1,385.87)
2,935	914.21	775.14	(15.21)	1,845.82	(931.61)	(1,070.68)
421,899	5,871.65	4,978.49	(15.21)	5,529.96	341.69	(551.46)
811,947	865.23	733.61	(15.21)	1,726.74	(861.51)	(993.12)
1,053,094	2,791.33	2,366.79	(15.21)	2,715.25	76.08	(348.47)
981,541	2,964.72	2,513.86	(15.21)	2,874.38	90.35	(360.52)
117,443	3,014.95	2,556.96	(15.19)	2,858.24	156.71	(301.28)
56,592	1,126.79	955.68	(15.19)	1,860.07	(733.27)	(904.39)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
666,639	2,318.32	1,966.57	(15.17)	2,156.54	161.77	(189.97)
1,403,270	1,088.89	923.68	(15.17)	1,383.76	(294.87)	(460.08)
270,773	4,563.41	3,871.15	(15.17)	4,683.27	(119.86)	(812.13)
1,032,038	3,146.14	2,668.95	(15.17)	3,109.19	36.95	(440.24)
341,499	3,202.44	2,716.89	(15.16)	3,535.29	(332.85)	(818.41)
30,297	4,731.44	4,014.20	(15.16)	4,645.31	86.13	(631.11)
1,105,781	821.78	697.23	(15.16)	1,110.04	(288.26)	(412.82)
165,283	4,555.01	3,864.79	(15.15)	4,895.75	(340.75)	(1,030.97)
924,611	2,763.22	2,344.62	(15.15)	2,982.65	(219.43)	(638.03)
42,192	1,125.59	955.11	(15.15)	1,327.60	(202.01)	(372.50)
958,076	2,455.59	2,083.82	(15.14)	2,346.12	109.47	(262.29)
759,673	4,697.89	3,986.80	(15.14)	5,236.03	(538.14)	(1,249.23)
843,690	5,608.78	4,760.04	(15.13)	5,703.61	(94.83)	(943.57)
1,400,648	4,314.75	3,661.96	(15.13)	4,340.70	(25.96)	(678.75)
264,900	2,820.39	2,394.13	(15.11)	2,733.66	86.73	(339.53)
454,591	3,600.23	3,056.26	(15.11)	3,476.56	123.67	(420.30)
927,726	3,123.47	2,651.55	(15.11)	3,289.58	(166.11)	(638.02)
612,639	3,417.88	2,901.58	(15.11)	3,186.56	231.32	(284.97)
488,683	7,252.54	6,157.30	(15.10)	7,186.35	66.20	(1,029.05)
416,542	3,046.51	2,586.58	(15.10)	3,122.48	(75.97)	(535.90)
807,782	1,868.75	1,586.64	(15.10)	1,899.65	(30.90)	(313.01)
960,928	3,452.70	2,931.73	(15.09)	3,926.98	(474.28)	(995.25)
1,037,339	4,585.16	3,893.44	(15.09)	4,446.49	138.67	(553.05)
753,139	5,741.90	4,876.11	(15.08)	5,790.43	(48.53)	(914.32)
567,747	2,454.82	2,085.00	(15.07)	2,520.11	(65.30)	(435.12)
436,010	5,043.53	4,283.72	(15.07)	5,380.29	(336.76)	(1,096.57)
864,990	3,792.98	3,221.78	(15.06)	4,200.55	(407.57)	(978.77)
279,630	2,480.88	2,107.35	(15.06)	2,472.29	8.59	(364.94)
1,296,068	4,679.29	3,975.11	(15.05)	4,680.28	(0.99)	(705.17)
535,573	1,115.38	947.56	(15.05)	1,578.66	(463.28)	(631.10)
440,890	3,536.52	3,004.43	(15.05)	3,470.87	65.65	(466.45)
911,799	1,899.41	1,613.67	(15.04)	1,995.90	(96.49)	(382.23)
1,393,598	3,709.88	3,151.87	(15.04)	3,760.21	(50.33)	(608.34)
89,503	2,268.44	1,927.28	(15.04)	2,267.19	1.25	(339.92)
628,361	1,880.41	1,597.62	(15.04)	2,158.98	(278.56)	(561.36)
1,232,728	4,416.64	3,752.66	(15.03)	4,112.97	303.67	(360.31)
402,984	3,488.83	2,964.49	(15.03)	3,693.32	(204.49)	(728.83)
466,470	2,816.40	2,393.52	(15.01)	2,765.05	51.34	(371.54)
1,407,698	6,179.49	5,251.66	(15.01)	6,171.09	8.40	(919.43)
712,652	4,081.41	3,469.03	(15.00)	3,839.51	241.90	(370.48)
627,332	3,681.96	3,129.71	(15.00)	3,585.54	96.42	(455.83)
952,622	4,086.29	3,473.79	(14.99)	3,886.15	200.14	(412.35)
89,058	3,544.37	3,013.18	(14.99)	3,326.45	217.92	(313.27)
1,225,573	2,320.03	1,972.33	(14.99)	2,359.88	(39.86)	(387.55)
168,915	3,812.58	3,241.20	(14.99)	3,574.17	238.41	(332.97)
279,677	2,980.14	2,533.63	(14.98)	3,075.76	(95.62)	(542.13)
1,111,874	2,421.77	2,059.03	(14.98)	2,606.27	(184.50)	(547.24)
70,466	760.17	646.37	(14.97)	756.54	3.63	(110.16)
480,568	5,178.52	4,403.41	(14.97)	5,187.60	(9.09)	(784.20)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
366,128	3,196.34	2,717.92	(14.97)	3,405.73	(209.39)	(687.81)
193,703	3,795.50	3,227.47	(14.97)	3,627.73	167.77	(400.27)
589,794	2,583.78	2,197.18	(14.96)	2,575.55	8.23	(378.37)
892,970	944.60	803.32	(14.96)	1,112.34	(167.74)	(309.02)
699,045	4,476.49	3,807.33	(14.95)	4,212.66	263.83	(405.34)
658,359	2,350.38	1,999.16	(14.94)	2,679.78	(329.40)	(680.62)
54,263	3,647.39	3,102.36	(14.94)	3,737.00	(89.60)	(634.63)
182,897	3,492.04	2,970.27	(14.94)	3,349.81	142.23	(379.54)
271,775	2,785.74	2,369.52	(14.94)	2,910.13	(124.39)	(540.61)
343,809	4,112.52	3,498.45	(14.93)	4,217.72	(105.20)	(719.28)
491,018	3,705.28	3,152.19	(14.93)	4,433.57	(728.29)	(1,281.38)
398,795	824.83	701.71	(14.93)	1,809.47	(984.64)	(1,107.76)
379,444	4,767.70	4,056.08	(14.93)	4,553.66	214.04	(497.58)
747,314	784.01	667.00	(14.93)	1,068.22	(284.21)	(401.23)
631,389	2,308.61	1,964.07	(14.92)	2,169.91	138.70	(205.84)
1,125,473	3,637.70	3,094.98	(14.92)	3,994.08	(356.38)	(899.09)
549,988	2,570.66	2,187.18	(14.92)	2,814.40	(243.75)	(627.23)
1,049,709	2,939.79	2,501.26	(14.92)	3,170.63	(230.84)	(669.36)
470,644	5,352.87	4,554.45	(14.92)	6,317.02	(964.15)	(1,762.58)
248,582	2,586.85	2,201.40	(14.90)	2,690.14	(103.29)	(488.74)
778,572	4,053.46	3,449.65	(14.90)	4,053.98	(0.52)	(604.32)
174,336	4,280.27	3,642.82	(14.89)	4,208.95	71.32	(566.13)
559,024	796.98	678.30	(14.89)	975.87	(178.89)	(297.57)
1,312,540	4,769.80	4,060.54	(14.87)	4,713.77	56.04	(653.23)
81,440	3,407.76	2,901.08	(14.87)	3,384.51	23.25	(483.43)
1,036,202	4,897.53	4,169.46	(14.87)	4,680.04	217.49	(510.58)
909,640	4,738.92	4,034.56	(14.86)	4,739.89	(0.97)	(705.33)
1,228,383	942.65	802.57	(14.86)	1,166.61	(223.96)	(364.04)
370,592	2,528.45	2,152.85	(14.85)	2,563.82	(35.37)	(410.97)
439,792	2,842.62	2,420.53	(14.85)	2,873.19	(30.58)	(452.66)
1,048,858	7,800.44	6,642.66	(14.84)	8,266.56	(466.12)	(1,623.91)
206,917	4,385.13	3,734.27	(14.84)	4,183.75	201.38	(449.47)
132,703	925.74	788.42	(14.83)	1,314.41	(388.68)	(525.99)
1,395,239	740.93	631.05	(14.83)	976.84	(235.90)	(345.79)
766,211	3,088.96	2,630.94	(14.83)	3,082.53	6.44	(451.59)
554,921	4,781.85	4,072.87	(14.83)	4,735.43	46.42	(662.56)
689,180	3,500.00	2,981.31	(14.82)	3,548.30	(48.29)	(566.99)
790,884	1,064.05	906.36	(14.82)	1,237.95	(173.90)	(331.59)
922,105	1,937.10	1,650.07	(14.82)	1,803.07	134.03	(152.99)
137,789	1,619.00	1,379.12	(14.82)	1,560.83	58.17	(181.72)
1,006,283	3,382.11	2,880.99	(14.82)	3,696.35	(314.24)	(815.36)
675,740	2,710.86	2,309.20	(14.82)	3,099.62	(388.76)	(790.42)
152,350	5,786.91	4,929.91	(14.81)	5,464.32	322.59	(534.40)
1,240,804	1,068.44	910.22	(14.81)	1,508.23	(439.79)	(598.01)
516,013	2,279.98	1,942.36	(14.81)	2,139.97	140.01	(197.61)
579,579	2,096.46	1,786.09	(14.80)	2,241.56	(145.10)	(455.47)
1,041,655	2,713.15	2,311.54	(14.80)	2,618.24	94.91	(306.70)
230,382	808.48	688.90	(14.79)	2,265.86	(1,457.37)	(1,576.96)
666,636	5,936.74	5,058.66	(14.79)	5,721.43	215.32	(662.77)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

<u>CUSTOMERID</u>	<u>Present Bill</u>	<u>APS Proposed</u>	<u>% Increase</u>	<u>Cost of Service</u>	<u>Present - Cost</u>	<u>Proposed - Cost</u>
179,420	5,359.54	4,567.15	(14.78)	5,066.02	293.52	(498.87)
924,018	2,753.14	2,346.12	(14.78)	2,698.87	54.27	(352.75)
1,227,167	817.36	696.60	(14.77)	846.51	(29.15)	(149.91)
1,177,562	3,194.40	2,722.70	(14.77)	3,124.90	69.50	(402.20)
111,286	3,649.50	3,110.60	(14.77)	3,617.44	32.07	(506.83)
850,324	1,103.44	940.57	(14.76)	1,729.97	(626.53)	(789.40)
384,125	2,768.05	2,359.89	(14.75)	2,759.56	8.49	(399.68)
924,404	2,688.70	2,292.49	(14.74)	2,582.29	106.41	(289.80)
136,949	3,636.99	3,101.25	(14.73)	3,419.02	217.97	(317.78)
401,285	2,481.51	2,116.07	(14.73)	2,661.82	(180.31)	(545.75)
822,918	3,898.82	3,324.77	(14.72)	3,903.81	(5.00)	(579.05)
257,829	1,058.62	902.77	(14.72)	1,047.95	10.67	(145.18)
209,438	2,232.93	1,904.30	(14.72)	2,073.65	159.29	(169.34)
624,758	5,080.70	4,333.01	(14.72)	5,106.40	(25.70)	(773.39)
751,584	3,254.08	2,775.29	(14.71)	3,107.34	146.74	(332.05)
166,137	1,074.05	916.03	(14.71)	1,078.56	(4.50)	(162.53)
912,876	888.49	757.78	(14.71)	827.15	61.34	(69.37)
1,224,054	538.64	459.49	(14.69)	1,212.82	(674.19)	(753.33)
874,638	4,617.97	3,939.45	(14.69)	4,445.66	172.32	(506.21)
995,944	3,168.39	2,703.07	(14.69)	3,059.61	108.79	(356.54)
334,503	2,495.44	2,128.95	(14.69)	2,662.24	(166.80)	(533.29)
190,151	2,327.97	1,986.22	(14.68)	2,530.95	(202.98)	(544.73)
15,396	4,528.20	3,863.65	(14.68)	4,550.63	(22.43)	(686.99)
194,712	3,776.22	3,222.14	(14.67)	4,048.78	(272.56)	(826.64)
730,349	2,824.89	2,410.48	(14.67)	2,854.38	(29.49)	(443.90)
155,218	3,968.44	3,386.72	(14.66)	3,850.03	118.41	(463.30)
730,541	2,592.98	2,212.96	(14.66)	2,471.92	121.06	(258.96)
845,737	843.81	720.16	(14.65)	989.42	(145.61)	(269.27)
150,400	3,856.57	3,291.46	(14.65)	3,975.47	(118.90)	(684.00)
1,002,827	3,393.54	2,896.29	(14.65)	3,279.61	113.93	(383.32)
641,788	1,024.55	874.44	(14.65)	1,613.91	(589.36)	(739.47)
524,679	2,575.81	2,198.41	(14.65)	2,546.80	29.01	(348.39)
798,407	1,023.21	873.34	(14.65)	1,361.69	(338.48)	(488.36)
129,798	3,561.66	3,040.00	(14.65)	3,489.94	71.72	(449.95)
996,507	3,954.20	3,375.30	(14.64)	3,873.86	80.34	(498.56)
1,096,522	2,912.12	2,485.88	(14.64)	2,956.73	(44.60)	(470.84)
880,957	4,740.12	4,046.34	(14.64)	4,942.50	(202.38)	(896.17)
1,028,778	2,605.61	2,224.26	(14.64)	2,534.04	71.57	(309.78)
1,046,564	2,361.50	2,016.09	(14.63)	2,222.46	139.04	(206.38)
436,713	3,809.37	3,252.47	(14.62)	3,678.89	130.47	(426.42)
38,643	2,518.04	2,150.05	(14.61)	2,722.23	(204.19)	(572.18)
1,341,931	1,079.12	921.48	(14.61)	1,374.13	(295.01)	(452.64)
281,520	2,193.43	1,873.03	(14.61)	2,094.86	98.57	(221.84)
114,254	2,894.80	2,472.01	(14.61)	2,919.39	(24.59)	(447.38)
944,584	6,928.55	5,916.71	(14.60)	6,441.68	486.86	(524.98)
64,903	3,055.41	2,609.22	(14.60)	2,929.01	126.40	(319.80)
621,955	3,116.21	2,661.48	(14.59)	3,084.90	31.31	(423.42)
708,014	5,029.29	4,295.69	(14.59)	5,258.36	(229.07)	(962.68)
339,494	6,176.46	5,276.09	(14.58)	6,068.39	108.07	(792.30)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
1,018,627	981.09	838.08	(14.58)	1,050.41	(69.32)	(212.33)
1,384,346	1,875.61	1,602.23	(14.58)	1,748.23	127.38	(146.00)
580,036	2,913.77	2,489.42	(14.56)	3,234.50	(320.73)	(745.07)
903,802	925.99	791.14	(14.56)	1,057.62	(131.63)	(266.48)
117,663	4,092.65	3,496.65	(14.56)	4,210.78	(118.13)	(714.13)
174,949	1,105.81	944.81	(14.56)	1,521.28	(415.47)	(576.46)
324,524	3,652.65	3,120.88	(14.56)	3,527.67	124.98	(406.79)
786,132	2,725.67	2,328.93	(14.56)	2,694.20	31.47	(365.27)
292,143	2,887.25	2,467.00	(14.56)	2,738.16	149.09	(271.17)
476,066	4,734.01	4,045.11	(14.55)	4,587.05	146.96	(541.94)
243,476	3,609.43	3,084.49	(14.54)	3,589.53	19.90	(505.05)
705,144	3,464.98	2,961.09	(14.54)	3,227.12	237.86	(266.03)
1,145,221	5,447.44	4,655.48	(14.54)	5,509.06	(61.62)	(853.57)
667,581	3,611.60	3,086.66	(14.53)	3,959.91	(348.31)	(873.25)
973,782	2,510.81	2,146.19	(14.52)	2,589.41	(78.60)	(443.22)
281,662	3,849.45	3,290.58	(14.52)	4,140.76	(291.31)	(850.18)
485,279	1,111.51	950.24	(14.51)	1,374.78	(263.27)	(424.54)
255,846	905.43	774.06	(14.51)	1,380.43	(475.00)	(606.37)
106,885	1,113.60	952.09	(14.50)	1,135.78	(22.18)	(183.70)
916,238	4,277.48	3,657.18	(14.50)	4,040.65	236.84	(383.46)
302,670	1,031.53	881.98	(14.50)	1,585.75	(554.22)	(703.76)
1,084,048	2,625.56	2,244.99	(14.49)	2,441.17	184.39	(196.17)
695,985	2,903.99	2,483.23	(14.49)	2,991.11	(87.12)	(507.88)
160,466	1,082.32	925.56	(14.48)	1,820.37	(738.05)	(894.81)
248,292	2,577.63	2,204.48	(14.48)	2,420.10	157.54	(215.62)
360,995	2,336.66	1,998.40	(14.48)	2,367.25	(30.59)	(368.85)
128,289	5,600.10	4,789.49	(14.47)	5,429.80	170.30	(640.31)
76,922	3,542.22	3,029.81	(14.47)	3,704.87	(162.65)	(675.06)
227,846	5,240.54	4,482.48	(14.47)	5,995.73	(755.20)	(1,513.25)
245,760	4,780.55	4,089.11	(14.46)	5,016.71	(236.16)	(927.60)
966,065	2,395.72	2,049.25	(14.46)	2,269.65	126.07	(220.39)
139,163	5,931.74	5,074.02	(14.46)	6,057.57	(125.83)	(983.55)
366,381	3,039.54	2,600.18	(14.45)	3,093.03	(53.49)	(492.85)
954,814	3,846.86	3,290.90	(14.45)	4,068.52	(221.66)	(777.62)
1,257,787	800.80	685.10	(14.45)	896.60	(95.79)	(211.49)
198,921	3,349.25	2,865.50	(14.44)	3,352.10	(2.85)	(486.59)
1,265,751	4,721.70	4,039.83	(14.44)	4,929.84	(208.15)	(890.01)
957,766	1,061.81	908.50	(14.44)	1,039.78	22.03	(131.27)
706,005	1,001.41	856.83	(14.44)	1,496.87	(495.46)	(640.04)
965,445	2,880.41	2,464.63	(14.44)	2,844.57	35.85	(379.94)
520,856	1,012.20	866.16	(14.43)	1,729.44	(717.24)	(863.28)
827,409	1,868.14	1,598.65	(14.43)	1,854.09	14.05	(255.44)
431,589	1,026.11	878.10	(14.42)	1,387.59	(361.48)	(509.49)
785,618	905.05	774.53	(14.42)	1,382.73	(477.68)	(608.20)
1,090,914	3,687.72	3,155.94	(14.42)	3,597.27	90.45	(441.32)
354,290	3,799.41	3,251.76	(14.41)	3,589.34	210.07	(337.58)
1,136,539	3,005.28	2,572.12	(14.41)	3,015.53	(10.25)	(443.41)
72,075	2,410.26	2,062.90	(14.41)	2,471.55	(61.29)	(408.65)
1,133,242	998.83	854.90	(14.41)	1,490.62	(491.79)	(635.71)



**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
289,750	3,139.17	2,686.94	(14.41)	3,411.79	(272.62)	(724.86)
412,177	4,585.37	3,924.83	(14.41)	4,799.90	(214.53)	(875.07)
1,114,011	2,537.80	2,172.26	(14.40)	2,358.91	178.89	(186.65)
359,313	2,061.02	1,764.16	(14.40)	1,978.27	82.75	(214.11)
752,662	531.10	454.62	(14.40)	823.48	(292.38)	(368.87)
714,535	3,947.94	3,379.51	(14.40)	4,072.50	(124.56)	(692.99)
844,662	4,157.17	3,558.62	(14.40)	3,927.41	229.76	(368.79)
1,358,972	627.05	536.83	(14.39)	1,312.09	(685.05)	(775.26)
691,805	3,032.30	2,596.42	(14.37)	3,053.51	(21.21)	(457.09)
936,517	2,777.08	2,377.98	(14.37)	2,755.65	21.43	(377.68)
672,303	782.37	669.99	(14.36)	753.59	28.78	(83.60)
964,793	1,101.83	943.57	(14.36)	1,189.06	(87.24)	(245.49)
815,365	2,141.59	1,834.22	(14.35)	2,228.37	(86.78)	(394.15)
382,751	1,026.92	879.56	(14.35)	1,456.45	(429.53)	(576.90)
104,982	2,931.66	2,510.97	(14.35)	3,046.79	(115.14)	(535.83)
956,241	901.93	772.52	(14.35)	930.08	(28.15)	(157.57)
284,889	964.23	826.00	(14.34)	1,272.30	(308.07)	(446.30)
811,897	4,556.85	3,903.73	(14.33)	4,484.87	71.98	(581.14)
568,395	3,400.57	2,913.29	(14.33)	3,272.55	128.02	(359.26)
87,293	1,112.01	952.67	(14.33)	1,042.01	70.00	(89.34)
619,260	1,119.27	958.95	(14.32)	1,107.91	11.37	(148.96)
1,002,891	5,363.08	4,595.22	(14.32)	5,065.50	297.58	(470.28)
881,356	3,932.57	3,369.53	(14.32)	3,710.93	221.63	(341.40)
512,304	1,031.57	883.88	(14.32)	1,196.83	(165.26)	(312.95)
1,189,549	544.81	466.81	(14.32)	607.54	(62.73)	(140.74)
433,600	3,370.50	2,888.12	(14.31)	3,552.86	(182.36)	(664.74)
994,167	2,437.69	2,088.81	(14.31)	2,297.84	139.84	(209.03)
764,992	2,259.24	1,935.94	(14.31)	2,261.58	(2.33)	(325.63)
563,593	2,599.51	2,227.61	(14.31)	2,741.14	(141.63)	(513.53)
166,348	2,829.20	2,424.48	(14.31)	2,843.74	(14.55)	(419.27)
973,332	3,089.67	2,647.91	(14.30)	3,255.39	(165.72)	(607.47)
250,822	2,637.68	2,260.70	(14.29)	2,545.98	91.70	(285.28)
127,532	2,792.97	2,393.82	(14.29)	2,705.03	87.94	(311.21)
1,244,469	3,317.32	2,843.30	(14.29)	3,097.33	219.98	(254.03)
696,784	3,128.32	2,681.32	(14.29)	3,097.10	31.22	(415.79)
356,705	2,381.13	2,041.30	(14.27)	2,364.54	16.60	(323.24)
13,610	3,191.33	2,736.17	(14.26)	3,416.58	(225.24)	(680.40)
702,844	2,890.87	2,478.59	(14.26)	2,812.91	77.96	(334.32)
1,092,610	4,264.19	3,656.44	(14.25)	4,237.83	26.36	(581.40)
1,151,606	855.88	733.92	(14.25)	997.82	(141.94)	(263.90)
465,253	740.12	634.72	(14.24)	1,227.82	(487.70)	(593.10)
1,184,390	2,883.55	2,472.90	(14.24)	2,919.17	(35.62)	(446.27)
214,147	5,782.25	4,958.81	(14.24)	5,496.20	286.05	(537.39)
1,296,235	3,366.79	2,887.50	(14.24)	3,513.31	(146.52)	(625.81)
863,072	1,087.02	932.31	(14.23)	1,114.49	(27.48)	(182.18)
349,800	3,128.49	2,683.55	(14.22)	3,002.23	126.26	(318.68)
991,754	2,699.48	2,315.70	(14.22)	2,703.91	(4.43)	(388.21)
1,210,463	3,655.30	3,135.66	(14.22)	3,575.47	79.83	(439.81)
1,054,596	5,241.07	4,496.62	(14.20)	5,347.28	(106.21)	(850.65)



**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
597,071	3,735.90	3,205.70	(14.19)	3,979.54	(243.64)	(773.84)
1,284,968	3,354.02	2,878.01	(14.19)	3,130.47	223.55	(252.45)
395,781	3,075.29	2,638.86	(14.19)	2,998.90	76.40	(360.03)
1,266,077	1,007.93	864.98	(14.18)	1,344.94	(337.01)	(479.96)
606,298	3,705.47	3,179.95	(14.18)	4,004.02	(298.55)	(824.07)
632,003	2,751.15	2,361.13	(14.18)	2,640.42	110.74	(279.29)
1,274,874	949.44	814.85	(14.18)	1,492.86	(543.43)	(678.01)
1,003,569	991.72	851.24	(14.17)	1,190.55	(198.84)	(339.32)
1,013,442	3,191.54	2,739.54	(14.16)	3,540.78	(349.24)	(801.24)
241,031	4,826.26	4,142.80	(14.16)	5,158.10	(331.84)	(1,015.30)
1,369,127	3,013.37	2,586.71	(14.16)	2,985.69	27.68	(398.98)
88,628	963.06	826.72	(14.16)	990.13	(27.07)	(163.40)
1,261,071	2,618.94	2,248.46	(14.15)	2,880.61	(261.67)	(632.15)
464,037	928.93	797.53	(14.15)	1,408.29	(479.37)	(610.77)
42,590	3,668.75	3,150.21	(14.13)	3,674.18	(5.44)	(523.97)
633,071	3,267.03	2,805.70	(14.12)	3,096.58	170.46	(290.88)
20,834	3,632.31	3,119.60	(14.12)	3,418.23	214.08	(298.63)
329,992	2,313.08	1,986.61	(14.11)	2,426.60	(113.52)	(439.99)
1,144,438	2,714.31	2,331.30	(14.11)	2,610.24	104.07	(278.94)
1,016,344	2,127.60	1,827.42	(14.11)	2,086.02	41.57	(258.60)
325,723	3,106.26	2,668.32	(14.10)	3,217.58	(111.32)	(549.26)
771,891	918.96	789.42	(14.10)	1,167.65	(248.69)	(378.23)
219,757	3,937.98	3,382.96	(14.09)	3,907.64	30.34	(524.68)
417,739	1,099.46	944.51	(14.09)	1,049.48	49.98	(104.97)
133,592	3,496.57	3,003.79	(14.09)	3,424.07	72.49	(420.28)
53,915	933.43	801.91	(14.09)	1,416.64	(483.21)	(614.73)
923,055	3,088.22	2,653.09	(14.09)	3,054.15	34.07	(401.06)
11,538	2,662.41	2,287.32	(14.09)	2,582.97	79.44	(295.65)
252,320	2,796.02	2,402.28	(14.08)	3,006.05	(210.02)	(603.77)
1,398,458	5,300.10	4,553.93	(14.08)	5,316.81	(16.71)	(762.88)
173,340	3,443.41	2,958.72	(14.08)	3,584.33	(140.93)	(625.61)
329,654	3,488.57	2,997.65	(14.07)	3,382.42	106.15	(384.77)
579,434	4,769.60	4,098.57	(14.07)	4,455.31	314.29	(356.74)
1,021,550	4,379.47	3,763.37	(14.07)	4,183.72	195.75	(420.36)
1,368,965	3,141.35	2,699.76	(14.06)	3,083.84	57.51	(384.08)
653,443	1,116.25	959.36	(14.06)	1,197.71	(81.46)	(238.35)
129,683	2,535.86	2,179.48	(14.05)	2,689.39	(153.53)	(509.91)
1,069,295	2,001.22	1,720.08	(14.05)	1,999.78	1.45	(279.69)
449,001	892.18	766.86	(14.05)	1,539.58	(647.40)	(772.72)
166,813	3,729.54	3,205.74	(14.04)	3,549.58	179.95	(343.84)
1,030,543	2,271.71	1,952.74	(14.04)	2,559.86	(288.15)	(607.12)
204,671	3,767.33	3,238.47	(14.04)	3,749.71	17.62	(511.24)
288,780	882.04	758.26	(14.03)	1,591.96	(709.92)	(833.70)
420,707	3,950.17	3,395.99	(14.03)	4,067.30	(117.14)	(671.31)
768,728	5,752.79	4,945.84	(14.03)	5,754.37	(1.59)	(808.54)
933,057	2,667.41	2,293.35	(14.02)	2,549.28	118.14	(255.93)
1,144,038	2,627.87	2,259.55	(14.02)	2,507.24	120.63	(247.69)
858,570	5,377.24	4,623.75	(14.01)	5,192.20	185.03	(568.45)
958,256	3,728.29	3,206.10	(14.01)	4,176.64	(448.35)	(970.54)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
140,232	1,034.71	889.83	(14.00)	1,641.41	(606.70)	(751.57)
1,102,292	5,455.00	4,691.54	(14.00)	5,863.56	(408.56)	(1,172.02)
1,046,897	2,789.76	2,399.41	(13.99)	3,028.00	(238.23)	(628.59)
286,150	1,932.18	1,661.83	(13.99)	2,092.67	(160.49)	(430.85)
1,383	2,031.41	1,747.17	(13.99)	2,165.00	(133.59)	(417.83)
126,371	3,142.39	2,702.73	(13.99)	3,113.53	28.85	(410.81)
1,158,782	2,596.44	2,233.23	(13.99)	2,555.95	40.49	(322.72)
295,636	4,770.28	4,102.99	(13.99)	4,522.40	247.88	(419.41)
1,021,709	1,099.34	945.61	(13.98)	1,088.69	10.66	(143.07)
660,572	3,008.28	2,587.97	(13.97)	2,844.03	164.25	(256.06)
374,590	858.64	738.68	(13.97)	1,307.04	(448.40)	(568.36)
928,040	2,980.95	2,564.58	(13.97)	2,936.49	44.45	(371.92)
459,959	2,633.09	2,265.37	(13.97)	2,462.05	171.04	(196.68)
52,537	3,506.63	3,017.21	(13.96)	3,319.24	187.39	(302.03)
944,557	2,379.56	2,047.49	(13.95)	2,503.55	(123.99)	(456.06)
505,405	887.23	763.45	(13.95)	1,293.50	(406.26)	(530.05)
647,336	2,971.77	2,557.19	(13.95)	2,936.11	35.65	(378.92)
46,188	2,277.40	1,959.78	(13.95)	2,482.16	(204.76)	(522.38)
185,810	2,691.10	2,315.81	(13.95)	2,742.19	(51.10)	(426.39)
167,377	1,034.35	890.15	(13.94)	2,078.65	(1,044.30)	(1,188.51)
414,873	749.61	645.12	(13.94)	1,264.55	(514.94)	(619.43)
98,531	2,896.90	2,493.15	(13.94)	3,138.96	(242.06)	(645.81)
982,721	5,058.46	4,353.74	(13.93)	5,410.63	(352.17)	(1,056.89)
1,243,419	3,551.68	3,056.96	(13.93)	3,793.21	(241.53)	(736.24)
69,587	2,489.52	2,142.91	(13.92)	2,388.39	101.12	(245.48)
279,842	1,054.53	907.73	(13.92)	1,697.36	(642.83)	(789.63)
202,823	2,478.42	2,133.48	(13.92)	3,025.11	(546.69)	(891.63)
1,159,286	1,899.13	1,634.92	(13.91)	1,814.61	84.52	(179.68)
1,020,539	4,066.67	3,501.32	(13.90)	3,876.68	189.99	(375.36)
1,009,799	2,536.36	2,183.87	(13.90)	2,826.04	(289.68)	(642.17)
441,236	2,804.65	2,414.96	(13.89)	3,324.42	(519.77)	(909.45)
760,230	825.54	710.84	(13.89)	1,856.94	(1,031.39)	(1,146.10)
495,734	674.88	581.14	(13.89)	1,009.35	(334.47)	(428.21)
740,402	2,848.40	2,452.78	(13.89)	3,056.92	(208.52)	(604.14)
127,753	2,933.79	2,526.42	(13.89)	3,167.15	(233.36)	(640.73)
289,701	2,466.47	2,124.09	(13.88)	2,563.65	(97.18)	(439.55)
358,025	3,518.86	3,030.53	(13.88)	3,361.46	157.40	(330.93)
905,582	2,178.34	1,876.17	(13.87)	2,197.77	(19.43)	(321.61)
1,131,333	4,022.33	3,464.56	(13.87)	4,036.49	(14.17)	(571.93)
940,773	2,729.03	2,350.72	(13.86)	2,724.20	4.83	(373.47)
854,765	4,557.31	3,925.65	(13.86)	4,871.67	(314.36)	(946.02)
584,794	851.01	733.06	(13.86)	1,200.65	(349.64)	(467.59)
484,804	3,562.53	3,068.86	(13.86)	3,327.99	234.54	(259.13)
1,204,241	2,551.88	2,198.27	(13.86)	2,404.11	147.77	(205.84)
878,224	2,525.45	2,175.50	(13.86)	2,516.69	8.75	(341.20)
1,193,189	2,481.32	2,137.80	(13.84)	2,500.21	(18.89)	(362.41)
943,568	837.91	722.02	(13.83)	1,366.03	(528.12)	(644.01)
156,950	2,953.35	2,545.33	(13.82)	2,864.60	88.75	(319.27)
257,738	4,740.30	4,085.44	(13.81)	5,193.15	(452.85)	(1,107.71)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
135,646	1,042.08	898.17	(13.81)	981.39	60.69	(83.22)
459,443	2,966.97	2,557.29	(13.81)	2,870.23	96.74	(312.94)
1,220,790	2,326.44	2,005.22	(13.81)	2,230.01	96.43	(224.79)
1,269,767	8,276.01	7,133.41	(13.81)	8,981.84	(705.84)	(1,848.43)
367,571	3,398.20	2,929.11	(13.80)	3,319.15	79.05	(390.04)
1,131,633	3,728.62	3,214.05	(13.80)	4,152.52	(423.89)	(938.47)
1,167,658	4,121.26	3,552.52	(13.80)	4,473.39	(352.13)	(920.87)
1,276,103	2,714.31	2,339.74	(13.80)	2,833.25	(118.94)	(493.51)
319,149	3,064.38	2,641.62	(13.80)	3,052.75	11.64	(411.12)
797,528	1,111.94	958.65	(13.79)	1,552.99	(441.05)	(594.34)
920,211	3,178.19	2,740.11	(13.78)	2,965.75	212.44	(225.64)
137,852	1,956.24	1,686.62	(13.78)	1,935.79	20.46	(249.17)
618,664	5,629.05	4,853.38	(13.78)	5,368.52	260.53	(515.14)
518,150	2,136.03	1,841.74	(13.78)	2,260.16	(124.12)	(418.41)
550,696	4,898.40	4,223.56	(13.78)	4,757.29	141.10	(533.74)
368,186	970.60	836.96	(13.77)	1,239.69	(269.08)	(402.72)
736,060	2,548.09	2,197.60	(13.75)	2,583.60	(35.51)	(386.00)
679,412	4,495.07	3,876.80	(13.75)	5,076.37	(581.29)	(1,199.57)
979,881	3,165.45	2,730.17	(13.75)	3,147.98	17.47	(417.81)
369,540	2,990.76	2,579.54	(13.75)	3,339.88	(349.12)	(760.34)
473,017	2,886.86	2,490.10	(13.74)	2,924.18	(37.32)	(434.08)
424,707	4,699.56	4,053.77	(13.74)	4,480.60	218.96	(426.83)
1,322,744	9,259.11	7,986.79	(13.74)	9,184.90	74.21	(1,198.10)
694,182	3,567.53	3,077.43	(13.74)	3,454.97	112.56	(377.54)
709,843	961.88	829.81	(13.73)	1,033.23	(71.35)	(203.42)
905,455	5,523.92	4,765.48	(13.73)	5,663.37	(139.45)	(897.89)
652,280	2,912.10	2,512.39	(13.73)	2,733.18	178.92	(220.79)
88,778	995.87	859.22	(13.72)	1,277.00	(281.13)	(417.78)
664,203	2,812.13	2,426.31	(13.72)	2,915.88	(103.75)	(489.57)
603,258	4,471.07	3,857.77	(13.72)	4,403.11	67.96	(545.34)
1,326,920	1,016.52	877.09	(13.72)	1,261.85	(245.33)	(384.76)
645,206	587.96	507.33	(13.71)	1,018.37	(430.41)	(511.03)
1,275,867	3,271.51	2,822.92	(13.71)	3,597.21	(325.70)	(774.29)
164,947	2,187.38	1,887.45	(13.71)	2,166.22	21.16	(278.76)
799,245	3,762.87	3,247.06	(13.71)	3,530.84	232.03	(283.78)
1,394,567	2,221.99	1,917.43	(13.71)	2,141.71	80.28	(224.28)
891,980	3,529.42	3,045.86	(13.70)	3,565.50	(36.08)	(519.64)
892,460	3,929.34	3,391.22	(13.69)	4,129.31	(199.97)	(738.09)
1,180,891	3,311.71	2,858.25	(13.69)	3,666.93	(355.23)	(808.68)
263,564	3,282.85	2,833.43	(13.69)	3,216.03	66.82	(382.60)
1,393,011	3,235.13	2,792.33	(13.69)	3,057.46	177.67	(265.13)
1,143,290	2,517.89	2,173.39	(13.68)	2,602.01	(84.12)	(428.62)
799,943	2,646.44	2,284.40	(13.68)	2,603.56	42.88	(319.16)
1,223,910	985.69	850.91	(13.67)	1,243.87	(258.18)	(392.96)
721,587	4,127.70	3,563.35	(13.67)	4,412.28	(284.58)	(848.93)
1,361,712	6,562.49	5,665.29	(13.67)	6,551.83	10.66	(886.54)
960,045	590.24	509.58	(13.67)	1,050.47	(460.23)	(540.89)
677,350	2,172.21	1,875.57	(13.66)	2,351.02	(178.80)	(475.44)
693,831	2,094.97	1,809.00	(13.65)	2,029.83	65.14	(220.83)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

<u>CUSTOMERID</u>	<u>Present Bill</u>	<u>APS Proposed</u>	<u>% Increase</u>	<u>Cost of Service</u>	<u>Present - Cost</u>	<u>Proposed - Cost</u>
706,574	3,514.04	3,034.52	(13.65)	4,121.08	(607.03)	(1,086.56)
418,400	3,829.95	3,307.61	(13.64)	3,701.85	128.10	(394.23)
123,223	2,820.35	2,435.71	(13.64)	2,916.23	(95.88)	(480.52)
1,040,065	948.00	818.83	(13.63)	1,141.74	(193.74)	(322.91)
680,008	2,314.90	1,999.79	(13.61)	2,673.49	(358.59)	(673.70)
28,182	2,899.01	2,504.49	(13.61)	2,764.81	134.20	(260.32)
675,255	3,083.11	2,663.56	(13.61)	3,168.49	(85.38)	(504.93)
886,272	1,941.54	1,677.41	(13.60)	1,821.17	120.37	(143.76)
172,640	2,293.42	1,981.47	(13.60)	2,364.95	(71.53)	(383.48)
697,481	873.36	754.60	(13.60)	1,509.03	(635.67)	(754.43)
415,717	3,430.21	2,963.79	(13.60)	3,529.89	(99.68)	(566.09)
1,078,499	2,053.51	1,774.34	(13.59)	2,064.09	(10.58)	(289.76)
785,452	1,088.83	940.81	(13.59)	1,330.35	(241.52)	(389.54)
155,335	319.44	276.04	(13.59)	303.04	16.40	(27.00)
991,669	2,212.07	1,911.64	(13.58)	2,162.44	49.62	(250.80)
1,121,590	3,033.21	2,621.36	(13.58)	3,293.78	(260.57)	(672.42)
1,005,532	3,981.24	3,440.72	(13.58)	4,047.71	(66.47)	(606.98)
937,754	3,541.25	3,060.64	(13.57)	3,704.09	(162.85)	(643.45)
183,716	2,627.23	2,270.76	(13.57)	2,839.43	(212.20)	(568.68)
539,987	3,106.95	2,685.39	(13.57)	3,245.68	(138.73)	(560.29)
754,498	4,021.01	3,475.49	(13.57)	3,790.09	230.92	(314.60)
686,912	4,164.25	3,599.39	(13.56)	4,350.26	(186.00)	(750.87)
997,251	3,623.28	3,131.86	(13.56)	3,428.37	194.91	(296.51)
405,957	517.46	447.31	(13.56)	716.97	(199.51)	(269.66)
470,963	3,364.11	2,908.12	(13.55)	3,434.47	(70.36)	(526.35)
37,129	2,539.20	2,195.37	(13.54)	2,675.31	(136.12)	(479.94)
699,571	3,474.67	3,004.30	(13.54)	3,435.68	38.99	(431.38)
476,714	2,030.37	1,755.80	(13.52)	2,080.13	(49.76)	(324.33)
924,139	4,235.29	3,662.55	(13.52)	4,052.59	182.70	(390.04)
593,430	3,806.56	3,291.97	(13.52)	3,774.63	31.92	(482.67)
1,018,524	2,537.79	2,194.84	(13.51)	2,727.79	(190.01)	(532.95)
709,968	2,101.43	1,817.49	(13.51)	2,654.07	(552.64)	(836.58)
170,042	3,434.14	2,970.41	(13.50)	4,250.56	(816.42)	(1,280.15)
583,768	1,858.75	1,607.81	(13.50)	1,962.43	(103.67)	(354.62)
174,127	2,560.02	2,214.42	(13.50)	2,652.39	(92.37)	(437.98)
883,978	3,502.23	3,029.90	(13.49)	3,549.93	(47.70)	(520.03)
374,793	3,568.50	3,087.29	(13.48)	3,795.34	(226.83)	(708.05)
1,263,545	3,546.41	3,068.20	(13.48)	3,832.88	(286.47)	(764.68)
670,251	841.22	727.82	(13.48)	913.53	(72.31)	(185.71)
182,570	3,437.01	2,973.70	(13.48)	3,477.02	(40.01)	(503.32)
512,955	3,551.93	3,073.16	(13.48)	4,175.46	(623.52)	(1,102.30)
963,632	2,964.23	2,564.71	(13.48)	2,971.59	(7.36)	(406.88)
1,148,381	2,787.86	2,412.18	(13.48)	2,896.42	(108.56)	(484.24)
437,611	923.59	799.13	(13.48)	1,568.06	(644.47)	(768.93)
664,242	1,467.61	1,270.17	(13.45)	1,401.99	65.62	(131.82)
1,043,113	3,137.49	2,715.70	(13.44)	3,376.57	(239.08)	(660.87)
929,262	3,176.59	2,749.60	(13.44)	3,263.63	(87.04)	(514.03)
163,544	2,588.34	2,240.62	(13.43)	2,448.31	140.03	(207.69)
391,605	2,229.26	1,929.94	(13.43)	2,187.09	42.17	(257.16)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
477,608	3,254.17	2,817.63	(13.41)	3,321.01	(66.84)	(503.38)
689,539	4,617.15	3,997.91	(13.41)	4,463.60	153.55	(465.69)
669,805	4,571.32	3,958.30	(13.41)	4,769.83	(198.52)	(811.53)
149,154	3,438.28	2,977.21	(13.41)	3,366.99	71.30	(389.77)
96,092	4,420.38	3,827.84	(13.40)	4,191.60	228.79	(363.75)
866,526	956.91	828.65	(13.40)	1,336.75	(379.85)	(508.10)
598,563	1,091.39	945.20	(13.39)	1,506.13	(414.74)	(560.93)
416,614	2,867.83	2,483.74	(13.39)	2,844.92	22.91	(361.18)
200,845	4,884.10	4,230.05	(13.39)	5,309.57	(425.48)	(1,079.52)
666,306	2,053.24	1,778.30	(13.39)	1,986.03	67.21	(207.74)
1,408,624	2,804.19	2,428.73	(13.39)	2,931.61	(127.43)	(502.89)
119,365	3,612.61	3,128.98	(13.39)	3,561.48	51.13	(432.50)
1,202,217	4,650.76	4,028.23	(13.39)	4,868.82	(218.05)	(840.59)
742,154	4,472.01	3,873.43	(13.38)	4,407.30	64.71	(533.87)
332,457	3,323.38	2,878.59	(13.38)	3,569.66	(246.28)	(691.08)
96,111	1,620.69	1,403.89	(13.38)	1,823.22	(202.53)	(419.33)
10,343	3,718.34	3,221.03	(13.37)	3,659.37	58.96	(438.35)
199,778	3,421.39	2,964.24	(13.36)	3,274.26	147.14	(310.02)
556,517	2,116.38	1,833.68	(13.36)	2,026.68	89.70	(193.00)
66,135	3,371.43	2,921.18	(13.35)	3,538.63	(167.20)	(617.45)
1,103,354	2,811.15	2,435.72	(13.35)	2,824.74	(13.59)	(389.01)
455,848	1,022.32	885.82	(13.35)	1,179.33	(157.01)	(293.51)
670,004	2,267.85	1,965.22	(13.34)	2,372.17	(104.32)	(406.95)
152,780	1,003.11	869.26	(13.34)	1,528.19	(525.08)	(658.93)
564,224	3,159.96	2,738.50	(13.34)	3,428.03	(268.06)	(689.53)
927,679	3,291.35	2,852.43	(13.34)	3,348.74	(57.39)	(496.31)
219,458	3,802.42	3,295.35	(13.34)	3,734.92	67.50	(439.57)
969,310	3,667.98	3,179.26	(13.32)	3,640.07	27.91	(460.81)
591,067	4,236.38	3,671.98	(13.32)	4,133.03	103.35	(461.05)
1,084,785	270.55	234.50	(13.32)	262.05	8.49	(27.55)
747,948	2,228.49	1,931.62	(13.32)	2,198.66	29.83	(267.05)
1,140,659	2,742.47	2,377.16	(13.32)	2,860.20	(117.73)	(483.03)
569,186	4,422.00	3,833.38	(13.31)	4,191.15	230.86	(357.77)
1,093,001	2,777.31	2,407.82	(13.30)	2,769.32	7.99	(361.50)
930,215	1,097.77	951.72	(13.30)	1,348.63	(250.87)	(396.91)
1,155,994	3,064.30	2,656.74	(13.30)	3,102.40	(38.11)	(445.66)
870,345	712.90	618.09	(13.30)	1,303.63	(590.73)	(685.55)
373,629	2,611.00	2,263.92	(13.29)	2,629.36	(18.35)	(365.44)
1,191,398	2,643.93	2,292.55	(13.29)	2,610.70	33.22	(318.16)
151,438	730.15	633.13	(13.29)	977.95	(247.80)	(344.83)
831,489	1,064.83	923.33	(13.29)	1,353.15	(288.31)	(429.81)
284,213	2,724.89	2,362.91	(13.28)	2,584.20	140.70	(221.28)
1,206,368	672.72	583.38	(13.28)	1,123.00	(450.28)	(539.62)
108,126	1,104.77	958.09	(13.28)	1,179.59	(74.82)	(221.50)
737,591	567.02	491.76	(13.27)	1,163.37	(596.35)	(671.61)
900,747	4,932.40	4,277.84	(13.27)	4,699.26	233.14	(421.42)
404,662	827.31	717.61	(13.26)	1,289.05	(461.74)	(571.44)
133,768	1,956.03	1,696.72	(13.26)	1,890.54	65.48	(193.82)
114,936	2,516.11	2,182.57	(13.26)	3,053.11	(536.99)	(870.54)



**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
1,015,411	2,549.34	2,211.46	(13.25)	2,555.87	(6.53)	(344.41)
484,083	3,655.60	3,171.15	(13.25)	3,700.07	(44.47)	(528.92)
786,170	1,862.56	1,615.80	(13.25)	1,836.75	25.81	(220.95)
1,385,171	1,053.71	914.12	(13.25)	1,406.83	(353.12)	(492.72)
563,192	1,041.69	903.70	(13.25)	1,674.00	(632.31)	(770.30)
1,184,938	2,014.27	1,747.52	(13.24)	1,963.78	50.50	(216.26)
958,002	2,143.24	1,859.48	(13.24)	2,380.92	(237.68)	(521.44)
950,363	3,607.89	3,130.25	(13.24)	3,783.38	(175.49)	(653.13)
681,645	4,597.54	3,988.92	(13.24)	5,251.84	(654.30)	(1,262.92)
253,305	3,647.09	3,164.46	(13.23)	4,166.06	(518.98)	(1,001.61)
835,487	3,810.18	3,306.07	(13.23)	4,070.48	(260.30)	(764.41)
463,380	2,485.13	2,156.40	(13.23)	2,608.25	(123.12)	(451.85)
204,503	2,753.78	2,389.74	(13.22)	2,674.28	79.50	(284.54)
764,676	2,949.41	2,559.78	(13.21)	3,274.58	(325.17)	(714.80)
1,166,206	4,338.36	3,765.28	(13.21)	5,149.98	(811.62)	(1,384.70)
934,978	857.40	744.15	(13.21)	1,264.40	(407.00)	(520.26)
306,528	2,540.11	2,204.60	(13.21)	2,428.08	112.03	(223.48)
823,248	3,027.73	2,627.83	(13.21)	3,046.66	(18.92)	(418.82)
841,706	3,296.28	2,860.91	(13.21)	3,272.07	24.20	(411.17)
448,237	1,050.89	912.13	(13.20)	1,619.64	(568.75)	(707.51)
984,010	929.57	806.84	(13.20)	1,194.69	(265.12)	(387.85)
840,684	2,930.70	2,543.81	(13.20)	2,863.81	66.89	(320.00)
676,407	1,805.29	1,566.97	(13.20)	1,781.49	23.79	(214.52)
875,206	3,094.84	2,686.33	(13.20)	3,028.00	66.83	(341.67)
32,937	5,022.15	4,359.83	(13.19)	4,839.69	182.47	(479.86)
281,804	3,365.58	2,921.89	(13.18)	3,371.75	(6.17)	(449.86)
1,270,633	1,041.61	904.31	(13.18)	1,962.98	(921.36)	(1,058.66)
178,657	1,029.29	893.62	(13.18)	1,191.61	(162.32)	(297.99)
107,664	4,040.01	3,507.53	(13.18)	3,798.18	241.83	(290.65)
678,195	2,814.46	2,443.64	(13.18)	3,033.27	(218.81)	(589.63)
113,225	2,184.36	1,896.57	(13.18)	2,157.27	27.09	(260.70)
435,218	3,325.39	2,887.49	(13.17)	3,921.15	(595.76)	(1,033.66)
1,073,120	804.78	698.81	(13.17)	1,544.23	(739.46)	(845.43)
892,611	2,925.39	2,540.29	(13.16)	3,159.06	(233.67)	(618.77)
3,482	4,289.08	3,724.59	(13.16)	4,174.66	114.43	(450.06)
28,584	3,250.96	2,823.20	(13.16)	3,561.36	(310.39)	(738.15)
97,072	2,483.02	2,156.32	(13.16)	2,541.21	(58.19)	(384.89)
721,485	6,071.75	5,272.99	(13.16)	6,310.70	(238.94)	(1,037.71)
474,007	4,147.14	3,601.66	(13.15)	3,909.27	237.87	(307.61)
856,753	4,319.65	3,751.62	(13.15)	4,662.25	(342.61)	(910.63)
1,278,919	4,141.32	3,596.88	(13.15)	4,037.82	103.51	(440.93)
1,265,774	4,125.92	3,583.54	(13.15)	4,170.03	(44.10)	(586.49)
962,852	2,502.21	2,173.38	(13.14)	2,692.64	(190.42)	(519.26)
742,689	966.98	839.92	(13.14)	1,370.28	(403.29)	(530.35)
353,657	872.14	757.59	(13.13)	1,578.77	(706.63)	(821.18)
811,392	3,399.65	2,953.15	(13.13)	4,034.34	(634.70)	(1,081.19)
672,981	3,732.88	3,242.63	(13.13)	3,890.27	(157.39)	(647.64)
66,393	4,815.15	4,182.92	(13.13)	4,732.19	82.96	(549.27)
1,334,577	3,646.83	3,168.04	(13.13)	3,412.11	234.72	(244.07)



**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
1,286,873	1,058.73	919.73	(13.13)	1,478.07	(419.35)	(558.35)
893,424	1,797.19	1,561.27	(13.13)	1,769.22	27.98	(207.95)
414,388	3,781.04	3,284.71	(13.13)	3,805.51	(24.47)	(520.80)
1,229,570	742.04	644.66	(13.12)	1,018.90	(276.86)	(374.24)
927,083	1,902.41	1,652.83	(13.12)	1,808.55	93.86	(155.72)
1,067,759	3,069.80	2,667.16	(13.12)	3,234.91	(165.11)	(567.76)
514,108	2,960.98	2,572.61	(13.12)	3,027.14	(66.16)	(454.53)
41,430	4,384.95	3,809.94	(13.11)	4,335.02	49.92	(525.08)
275,278	653.08	567.46	(13.11)	663.60	(10.52)	(96.14)
1,186,699	2,073.73	1,801.87	(13.11)	2,138.51	(64.77)	(336.64)
854,740	3,253.46	2,827.06	(13.11)	3,362.56	(109.10)	(535.50)
491,751	3,217.75	2,796.05	(13.11)	3,530.34	(312.59)	(734.29)
1,048,200	760.58	660.97	(13.10)	947.59	(187.01)	(286.62)
438,274	1,063.23	924.00	(13.09)	1,002.81	60.41	(78.81)
23,848	5,495.75	4,776.21	(13.09)	5,352.88	142.88	(576.67)
750,236	2,517.82	2,188.29	(13.09)	2,546.02	(28.20)	(357.73)
960,728	2,452.67	2,131.67	(13.09)	2,560.49	(107.82)	(428.82)
1,081,897	3,062.56	2,661.95	(13.08)	3,145.79	(83.24)	(483.85)
458,786	3,952.29	3,435.41	(13.08)	4,551.62	(599.34)	(1,116.21)
78,355	763.34	663.56	(13.07)	1,031.74	(268.40)	(368.17)
885,423	844.38	734.05	(13.07)	1,016.55	(172.17)	(282.49)
361,129	876.03	761.59	(13.06)	873.48	2.55	(111.89)
1,385,837	2,007.24	1,745.04	(13.06)	1,979.66	27.58	(234.63)
1,375,698	7,055.68	6,134.06	(13.06)	6,668.36	387.32	(534.30)
957,907	2,449.70	2,129.80	(13.06)	2,381.69	68.01	(251.89)
540,134	2,020.65	1,756.82	(13.06)	2,157.14	(136.49)	(400.32)
320,033	2,274.01	1,977.13	(13.06)	2,370.79	(96.78)	(393.67)
15,508	2,456.14	2,135.47	(13.06)	2,445.62	10.51	(310.15)
1,080,181	1,084.46	942.90	(13.05)	1,447.61	(363.15)	(504.71)
733,242	2,925.98	2,544.07	(13.05)	2,936.35	(10.37)	(392.28)
825,602	703.13	611.37	(13.05)	1,094.36	(391.23)	(482.99)
719,940	3,765.98	3,274.61	(13.05)	3,940.85	(174.86)	(666.23)
233,539	3,712.58	3,228.24	(13.05)	3,851.17	(138.59)	(622.93)
842,861	2,594.49	2,256.04	(13.05)	2,671.25	(76.76)	(415.21)
581,585	1,049.80	912.94	(13.04)	1,689.53	(639.73)	(776.60)
38,975	987.71	858.96	(13.04)	1,037.46	(49.74)	(178.49)
575,310	2,727.57	2,372.31	(13.02)	2,615.14	112.42	(242.83)
699,370	1,032.86	898.34	(13.02)	1,475.30	(442.44)	(576.96)
694,652	3,168.22	2,755.83	(13.02)	3,055.27	112.95	(299.44)
947,432	725.64	631.23	(13.01)	826.65	(101.01)	(195.42)
818,945	1,961.18	1,706.11	(13.01)	2,030.36	(69.18)	(324.24)
1,289,543	4,082.57	3,551.92	(13.00)	3,926.41	156.16	(374.50)
108,134	2,414.56	2,100.78	(13.00)	2,828.39	(413.83)	(727.62)
795,443	4,525.08	3,937.36	(12.99)	4,649.27	(124.19)	(711.90)
1,004,552	2,233.42	1,943.37	(12.99)	2,379.38	(145.96)	(436.01)
1,050,010	1,000.38	870.47	(12.99)	1,119.80	(119.41)	(249.32)
214,660	2,410.82	2,097.79	(12.98)	2,806.82	(396.00)	(709.03)
330,852	4,765.66	4,147.03	(12.98)	4,945.17	(179.51)	(798.14)
774,382	2,982.09	2,595.24	(12.97)	2,812.18	169.92	(216.94)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
57,286	2,690.87	2,341.82	(12.97)	3,007.15	(316.28)	(665.33)
1,071,348	2,951.30	2,568.66	(12.97)	3,284.43	(333.12)	(715.76)
262,964	669.93	583.10	(12.96)	1,258.27	(588.33)	(675.17)
280,437	898.07	781.71	(12.96)	1,663.21	(765.14)	(881.50)
18,217	2,644.29	2,301.76	(12.95)	2,637.91	6.38	(336.15)
731,904	987.26	859.41	(12.95)	1,384.03	(396.77)	(524.61)
39,472	1,018.58	886.69	(12.95)	1,159.09	(140.51)	(272.40)
1,005,850	3,811.53	3,318.02	(12.95)	3,741.49	70.04	(423.47)
921,508	3,350.93	2,917.24	(12.94)	3,457.74	(106.81)	(540.50)
1,223,506	5,873.29	5,113.95	(12.93)	5,854.15	19.14	(740.20)
1,269,519	499.27	434.73	(12.93)	623.41	(124.14)	(188.68)
853,011	2,272.98	1,979.25	(12.92)	2,325.59	(52.61)	(346.34)
1,202,901	4,778.55	4,161.16	(12.92)	4,756.98	21.58	(595.82)
502,187	3,133.84	2,729.06	(12.92)	3,352.31	(218.47)	(623.26)
762,888	3,220.72	2,804.72	(12.92)	3,310.32	(89.60)	(505.60)
340,459	5,058.70	4,405.31	(12.92)	5,265.20	(206.50)	(859.89)
737,844	4,148.88	3,613.20	(12.91)	3,958.32	190.56	(345.13)
540,838	4,842.71	4,217.65	(12.91)	4,778.92	63.78	(561.27)
569,767	5,402.04	4,704.81	(12.91)	6,458.61	(1,056.56)	(1,753.80)
281,696	1,944.14	1,693.41	(12.90)	2,088.01	(143.87)	(394.60)
284,749	2,328.64	2,028.40	(12.89)	2,390.16	(61.53)	(361.76)
1,071,899	2,055.56	1,790.60	(12.89)	2,047.85	7.71	(257.24)
1,230,086	3,042.84	2,650.64	(12.89)	3,081.96	(39.13)	(431.32)
615,792	6,753.57	5,883.47	(12.88)	6,870.79	(117.22)	(987.33)
1,079,169	2,263.73	1,972.23	(12.88)	2,156.70	107.03	(184.47)
636,208	971.72	846.61	(12.87)	1,077.62	(105.90)	(231.01)
803,677	3,112.59	2,711.92	(12.87)	3,503.56	(390.97)	(791.64)
371,948	3,698.32	3,222.41	(12.87)	3,604.71	93.61	(382.29)
382,069	4,514.98	3,933.99	(12.87)	4,915.14	(400.16)	(981.15)
815,909	2,750.52	2,396.82	(12.86)	2,768.88	(18.36)	(372.06)
280,526	972.71	847.65	(12.86)	1,326.70	(353.99)	(479.06)
704,906	1,056.70	920.84	(12.86)	1,817.59	(760.89)	(896.75)
931,693	979.13	853.25	(12.86)	1,395.91	(416.78)	(542.66)
88,437	3,784.60	3,298.08	(12.86)	3,800.79	(16.19)	(502.70)
606,110	925.87	806.87	(12.85)	1,120.82	(194.94)	(313.95)
67,196	4,166.81	3,631.25	(12.85)	4,013.23	153.58	(381.98)
496,352	3,561.58	3,103.99	(12.85)	3,375.45	186.12	(271.47)
187,658	1,057.49	921.64	(12.85)	1,121.24	(63.74)	(199.60)
1,329,944	3,241.74	2,825.29	(12.85)	3,109.80	131.95	(284.50)
683,145	9,718.68	8,470.34	(12.84)	9,641.96	76.71	(1,171.62)
1,118,219	4,027.83	3,510.65	(12.84)	4,366.55	(338.73)	(855.90)
464,783	921.73	803.38	(12.84)	1,664.60	(742.87)	(861.22)
11,116	1,077.37	939.07	(12.84)	1,663.55	(586.18)	(724.48)
927,258	1,828.29	1,593.67	(12.83)	1,804.30	23.99	(210.63)
178,020	3,008.46	2,622.54	(12.83)	3,575.43	(566.97)	(952.89)
776,351	972.36	847.65	(12.83)	1,044.02	(71.65)	(196.37)
1,277,560	731.17	637.41	(12.82)	1,365.04	(633.87)	(727.63)
1,124,816	946.58	825.22	(12.82)	1,753.35	(806.77)	(928.12)
360,524	2,136.74	1,862.84	(12.82)	2,425.71	(288.98)	(562.87)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
471,470	864.97	754.13	(12.81)	1,231.11	(366.14)	(476.98)
1,042,671	1,062.37	926.25	(12.81)	1,503.05	(440.68)	(576.81)
358,160	1,028.13	896.39	(12.81)	2,089.39	(1,061.26)	(1,192.99)
354,316	4,079.35	3,556.79	(12.81)	4,130.42	(51.07)	(573.63)
396,728	4,276.45	3,728.67	(12.81)	4,469.09	(192.64)	(740.42)
568,708	3,902.36	3,402.60	(12.81)	3,796.57	105.78	(393.97)
889,765	3,120.62	2,721.03	(12.80)	3,073.10	47.51	(352.07)
50,823	1,079.80	941.56	(12.80)	1,927.80	(848.00)	(986.24)
180,377	3,451.06	3,009.36	(12.80)	4,413.91	(962.85)	(1,404.55)
1,363,931	6,412.40	5,592.28	(12.79)	6,168.09	244.31	(575.81)
247,966	746.27	650.83	(12.79)	1,100.68	(354.41)	(449.85)
750,231	2,502.20	2,182.22	(12.79)	2,464.76	37.44	(282.53)
1,045,346	725.18	632.48	(12.78)	933.94	(208.77)	(301.47)
708,664	3,869.82	3,375.27	(12.78)	3,642.03	227.78	(266.76)
888,206	2,329.97	2,032.27	(12.78)	2,326.33	3.64	(294.06)
932,623	2,431.54	2,120.90	(12.78)	2,393.37	38.18	(272.47)
1,260,372	1,019.42	889.18	(12.78)	1,467.79	(448.37)	(578.61)
1,219,491	3,524.77	3,074.52	(12.77)	3,419.18	105.59	(344.66)
542,404	1,767.84	1,542.07	(12.77)	1,882.83	(114.99)	(340.76)
911,104	4,065.43	3,546.24	(12.77)	3,930.44	134.99	(384.20)
399,888	4,008.83	3,496.88	(12.77)	4,028.77	(19.94)	(531.89)
341,836	3,947.38	3,443.32	(12.77)	4,424.52	(477.15)	(981.21)
484,727	927.22	808.87	(12.76)	1,416.63	(489.41)	(607.76)
219,968	2,704.78	2,359.60	(12.76)	2,931.91	(227.13)	(572.31)
863,872	545.15	475.59	(12.76)	778.68	(233.53)	(303.09)
1,022,955	3,560.54	3,106.26	(12.76)	3,510.74	49.80	(404.49)
586,976	3,822.93	3,335.16	(12.76)	4,116.23	(293.30)	(781.07)
131,432	2,488.31	2,171.00	(12.75)	2,435.14	53.16	(264.14)
594,796	1,571.29	1,370.94	(12.75)	1,533.16	38.13	(162.22)
809,297	2,580.98	2,251.91	(12.75)	2,535.86	45.12	(283.95)
814,511	1,062.51	927.08	(12.75)	1,716.06	(653.55)	(788.97)
515,603	743.77	648.97	(12.75)	833.58	(89.82)	(184.61)
703,951	2,774.36	2,420.83	(12.74)	2,906.93	(132.57)	(486.11)
565,243	888.53	775.35	(12.74)	1,643.03	(754.50)	(867.69)
1,310,334	4,122.47	3,597.44	(12.74)	3,956.65	165.82	(359.21)
1,015,247	418.64	365.32	(12.74)	429.93	(11.29)	(64.61)
558,337	2,585.20	2,256.02	(12.73)	2,456.86	128.34	(200.84)
1,059,723	1,027.16	896.39	(12.73)	1,441.17	(414.00)	(544.77)
589,046	2,285.61	1,994.81	(12.72)	2,381.52	(95.91)	(386.71)
1,265,750	3,450.79	3,011.80	(12.72)	3,714.73	(263.93)	(702.93)
1,400,617	2,274.38	1,985.16	(12.72)	2,382.41	(108.03)	(397.25)
1,096,368	3,305.61	2,885.28	(12.72)	4,020.68	(715.08)	(1,135.41)
1,240,395	6,731.55	5,875.70	(12.71)	6,645.43	86.12	(769.74)
644,218	638.08	556.95	(12.71)	1,321.16	(683.09)	(764.21)
1,409,414	4,658.68	4,066.39	(12.71)	4,873.18	(214.50)	(806.79)
1,110,061	2,111.88	1,843.39	(12.71)	2,179.92	(68.04)	(336.53)
13,832	3,903.82	3,407.52	(12.71)	4,298.50	(394.68)	(890.98)
501,368	4,805.33	4,194.47	(12.71)	4,615.37	189.96	(420.90)
1,175,347	4,796.57	4,186.88	(12.71)	4,862.52	(65.95)	(675.64)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
989,765	2,683.03	2,342.14	(12.71)	2,688.56	(5.53)	(346.42)
56,726	2,273.99	1,985.35	(12.69)	2,200.57	73.43	(215.22)
1,176,307	3,878.87	3,386.51	(12.69)	3,810.33	68.54	(423.82)
1,376,318	789.27	689.09	(12.69)	821.25	(31.97)	(132.16)
615,361	1,087.95	949.86	(12.69)	1,501.29	(413.33)	(551.43)
751,232	1,076.38	939.76	(12.69)	1,677.96	(601.58)	(738.20)
76,534	956.74	835.31	(12.69)	1,712.75	(756.01)	(877.44)
26,519	4,893.08	4,272.37	(12.69)	5,101.80	(208.72)	(829.43)
1,168,412	4,050.03	3,536.34	(12.68)	3,930.59	119.43	(394.25)
1,186,804	2,575.14	2,248.92	(12.67)	2,625.98	(50.84)	(377.06)
287,393	2,578.73	2,252.09	(12.67)	2,577.71	1.02	(325.63)
523,652	3,628.07	3,168.61	(12.66)	3,705.09	(77.01)	(536.48)
727,953	897.63	784.07	(12.65)	1,440.44	(542.81)	(656.37)
834,472	3,617.61	3,160.02	(12.65)	3,818.87	(201.27)	(658.86)
1,169,549	3,263.91	2,851.11	(12.65)	3,659.82	(395.91)	(808.71)
1,123,136	1,092.51	954.36	(12.65)	1,149.42	(56.91)	(195.06)
543,694	2,953.53	2,580.13	(12.64)	3,218.66	(265.13)	(638.52)
1,041,654	2,495.22	2,179.80	(12.64)	2,518.76	(23.54)	(338.96)
1,077,495	2,881.09	2,516.94	(12.64)	2,873.63	7.46	(356.68)
470,958	3,088.45	2,698.14	(12.64)	3,049.00	39.45	(350.86)
455,343	880.68	769.44	(12.63)	1,155.16	(274.48)	(385.71)
694,196	2,086.19	1,822.74	(12.63)	2,279.12	(192.93)	(456.38)
987,713	3,220.46	2,813.79	(12.63)	3,153.95	66.50	(340.17)
1,255,392	1,047.44	915.20	(12.63)	1,552.52	(505.07)	(637.32)
1,055,408	3,231.76	2,823.77	(12.62)	3,190.20	41.56	(366.43)
778,714	1,938.73	1,694.01	(12.62)	1,873.68	65.05	(179.67)
33,294	3,788.39	3,310.70	(12.61)	3,583.35	205.05	(272.65)
796,042	3,433.13	3,000.38	(12.61)	3,625.68	(192.55)	(625.30)
634,287	2,530.41	2,211.45	(12.61)	2,600.07	(69.66)	(388.62)
85,480	1,010.82	883.43	(12.60)	1,649.00	(638.18)	(765.57)
231,631	3,575.58	3,125.36	(12.59)	3,912.50	(336.92)	(787.14)
454,494	3,062.89	2,677.27	(12.59)	3,144.29	(81.40)	(467.02)
1,369,132	3,359.88	2,937.20	(12.58)	3,148.82	211.06	(211.62)
1,024,697	1,953.62	1,707.86	(12.58)	2,014.09	(60.46)	(306.23)
710,542	1,005.22	878.88	(12.57)	1,593.38	(588.16)	(714.50)
319,376	3,649.28	3,190.82	(12.56)	3,539.00	110.28	(348.18)
199,311	3,072.25	2,686.31	(12.56)	2,901.07	171.18	(214.76)
599,218	3,615.96	3,161.75	(12.56)	3,534.27	81.69	(372.52)
357,707	2,868.38	2,508.16	(12.56)	3,196.77	(328.39)	(688.60)
902,644	3,268.38	2,857.96	(12.56)	3,426.13	(157.75)	(568.17)
1,015,112	3,508.65	3,068.09	(12.56)	3,473.86	34.79	(405.77)
755,658	945.37	826.67	(12.56)	941.44	3.94	(114.77)
568,483	912.43	797.94	(12.55)	910.60	1.84	(112.65)
125,373	3,789.48	3,314.04	(12.55)	3,553.29	236.19	(239.24)
1,237,165	4,150.54	3,630.09	(12.54)	4,752.89	(602.35)	(1,122.80)
774,350	3,120.62	2,729.34	(12.54)	3,378.23	(257.60)	(648.88)
133,504	5,509.59	4,818.98	(12.53)	6,565.51	(1,055.92)	(1,746.54)
389,771	2,611.26	2,283.97	(12.53)	2,561.61	49.65	(277.64)
630,533	3,662.23	3,203.22	(12.53)	3,605.74	56.49	(402.51)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
440,324	2,139.36	1,871.28	(12.53)	2,015.94	123.43	(144.66)
74,246	2,616.35	2,288.60	(12.53)	2,797.72	(181.37)	(509.12)
936,063	3,265.13	2,856.35	(12.52)	3,201.36	63.77	(345.00)
811,011	2,959.81	2,589.26	(12.52)	2,924.63	35.18	(335.37)
745,580	975.11	853.07	(12.52)	1,231.11	(256.00)	(378.04)
310,929	2,535.99	2,218.62	(12.51)	2,802.31	(266.31)	(583.68)
64,381	1,042.94	912.43	(12.51)	1,469.60	(426.66)	(557.17)
880,780	1,989.64	1,740.70	(12.51)	1,880.45	109.19	(139.75)
437,129	872.77	763.65	(12.50)	1,096.21	(223.44)	(332.56)
11,507	948.16	829.70	(12.49)	1,018.09	(69.93)	(188.39)
73,877	2,755.45	2,411.23	(12.49)	2,690.47	64.99	(279.23)
514,029	2,196.93	1,922.53	(12.49)	2,192.23	4.70	(269.70)
626,253	1,073.06	939.03	(12.49)	1,312.00	(238.95)	(372.97)
26,253	3,543.68	3,101.08	(12.49)	3,637.88	(94.21)	(536.80)
324,344	3,263.71	2,856.12	(12.49)	3,283.51	(19.80)	(427.39)
691,554	3,929.45	3,439.16	(12.48)	3,886.99	42.47	(447.83)
1,356,654	4,936.47	4,320.77	(12.47)	5,295.74	(359.28)	(974.98)
75,633	977.28	855.42	(12.47)	1,628.45	(651.16)	(773.03)
673,682	2,279.77	1,995.50	(12.47)	2,248.88	30.89	(253.38)
471,832	2,244.09	1,964.36	(12.47)	2,402.05	(157.95)	(437.69)
327,118	2,748.04	2,405.49	(12.47)	3,001.97	(253.93)	(596.48)
91,021	3,906.56	3,419.63	(12.46)	4,056.22	(149.66)	(636.59)
261,237	4,364.97	3,820.96	(12.46)	4,333.99	30.98	(513.03)
21,937	3,661.14	3,204.91	(12.46)	3,833.79	(172.65)	(628.88)
1,225,159	1,091.52	955.54	(12.46)	1,548.27	(456.74)	(592.72)
240,337	2,842.89	2,488.78	(12.46)	2,769.47	73.42	(280.69)
1,174,174	3,375.20	2,954.82	(12.46)	3,950.74	(575.54)	(995.92)
577,697	3,974.15	3,479.20	(12.45)	4,045.41	(71.26)	(566.21)
559,272	4,099.99	3,589.49	(12.45)	4,114.27	(14.28)	(524.78)
996,125	3,067.85	2,686.05	(12.45)	3,072.89	(5.05)	(386.84)
700,778	2,751.23	2,408.92	(12.44)	2,686.97	64.26	(278.04)
657,533	2,573.53	2,253.34	(12.44)	2,490.29	83.24	(236.94)
352,755	1,600.07	1,401.03	(12.44)	1,736.34	(136.27)	(335.31)
398,778	928.48	812.99	(12.44)	1,337.83	(409.34)	(524.84)
437,017	1,095.42	959.18	(12.44)	1,704.74	(609.31)	(745.56)
254,636	3,814.22	3,339.83	(12.44)	3,612.69	201.54	(272.86)
811,850	865.56	757.91	(12.44)	1,393.64	(528.07)	(635.73)
221,252	2,436.60	2,133.73	(12.43)	2,790.20	(353.60)	(656.48)
126,495	1,973.21	1,727.98	(12.43)	1,853.85	119.35	(125.88)
34,811	4,217.23	3,693.12	(12.43)	4,061.79	155.44	(368.67)
967,315	1,556.92	1,363.44	(12.43)	1,617.51	(60.59)	(254.06)
1,322,760	12,126.37	10,619.55	(12.43)	12,224.52	(98.15)	(1,604.98)
108,103	3,633.69	3,182.29	(12.42)	3,861.44	(227.75)	(679.15)
178,059	804.65	704.71	(12.42)	1,156.88	(352.22)	(452.17)
268,744	4,452.80	3,899.75	(12.42)	4,564.39	(111.58)	(664.64)
1,009,896	533.56	467.31	(12.42)	769.17	(235.61)	(301.85)
224,558	5,196.52	4,551.48	(12.41)	5,326.99	(130.47)	(775.50)
1,415,466	9,313.38	8,157.81	(12.41)	9,153.24	160.14	(995.43)
872,439	1,076.24	942.71	(12.41)	1,882.86	(806.62)	(940.15)



**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
785,467	2,501.03	2,190.83	(12.40)	2,370.35	130.68	(179.52)
616,550	2,163.44	1,895.33	(12.39)	2,389.43	(225.99)	(494.09)
1,111,194	2,682.21	2,349.93	(12.39)	2,680.37	1.85	(330.44)
1,055,757	815.08	714.14	(12.38)	1,678.58	(863.49)	(964.44)
1,129,019	2,992.96	2,622.37	(12.38)	3,200.28	(207.31)	(577.91)
770,343	2,411.29	2,112.73	(12.38)	2,435.46	(24.17)	(322.73)
86,482	847.88	742.90	(12.38)	1,365.27	(517.40)	(622.37)
299,972	6,390.32	5,599.38	(12.38)	6,599.88	(209.56)	(1,000.50)
702,213	2,746.45	2,406.58	(12.37)	2,968.43	(221.99)	(561.85)
358,739	952.93	835.02	(12.37)	1,516.16	(563.23)	(681.14)
219,677	2,538.11	2,224.14	(12.37)	2,473.16	64.96	(249.02)
434,465	3,773.11	3,306.37	(12.37)	3,603.36	169.75	(296.99)
491,638	3,290.58	2,883.54	(12.37)	3,247.30	43.28	(363.76)
275,666	1,018.17	892.23	(12.37)	1,212.71	(194.54)	(320.48)
656,863	2,525.46	2,213.08	(12.37)	2,441.22	84.24	(228.15)
787,054	982.42	860.92	(12.37)	1,100.74	(118.31)	(239.82)
512,306	3,076.92	2,696.51	(12.36)	3,231.82	(154.90)	(535.31)
250,011	3,631.28	3,182.38	(12.36)	3,609.36	21.92	(426.98)
1,034,146	4,298.43	3,767.24	(12.36)	4,407.78	(109.34)	(640.53)
732,451	3,350.13	2,936.17	(12.36)	3,395.47	(45.35)	(459.30)
1,245,727	1,027.42	900.50	(12.35)	1,732.36	(704.94)	(831.86)
802,685	1,003.46	879.58	(12.35)	1,502.81	(499.35)	(623.23)
475,473	2,481.76	2,175.53	(12.34)	2,705.10	(223.34)	(529.57)
385,186	2,520.37	2,209.39	(12.34)	2,465.38	54.99	(255.99)
394,394	3,610.76	3,165.25	(12.34)	3,954.97	(344.21)	(789.72)
420,609	3,296.82	2,890.31	(12.33)	3,662.43	(365.61)	(772.12)
948,659	729.10	639.24	(12.33)	1,264.80	(535.70)	(625.57)
129,755	2,049.82	1,797.19	(12.32)	2,120.34	(70.51)	(323.15)
625,725	4,442.97	3,895.64	(12.32)	4,940.94	(497.96)	(1,045.29)
1,384,390	2,204.51	1,933.09	(12.31)	2,166.57	37.94	(233.49)
632,997	4,235.92	3,714.57	(12.31)	4,089.13	146.79	(374.56)
15,240	2,218.07	1,945.11	(12.31)	2,293.42	(75.35)	(348.31)
213,056	3,952.86	3,466.54	(12.30)	3,985.03	(32.17)	(518.50)
53,632	2,601.62	2,281.58	(12.30)	2,622.54	(20.92)	(340.97)
109,329	3,051.33	2,675.98	(12.30)	3,015.73	35.60	(339.75)
884,713	2,772.65	2,431.61	(12.30)	2,607.48	165.17	(175.87)
666,982	810.80	711.07	(12.30)	1,345.10	(534.30)	(634.03)
696,167	3,183.90	2,792.30	(12.30)	3,291.16	(107.26)	(498.85)
319,038	2,522.56	2,212.37	(12.30)	2,472.94	49.62	(260.57)
1,371,720	6,098.43	5,348.64	(12.29)	6,208.56	(110.14)	(859.93)
471,328	1,028.06	901.67	(12.29)	2,221.96	(1,193.90)	(1,320.29)
146,879	3,862.82	3,388.02	(12.29)	3,805.65	57.17	(417.62)
1,011,972	4,035.21	3,539.45	(12.29)	4,411.10	(375.90)	(871.65)
539,459	2,259.94	1,982.30	(12.29)	2,382.60	(122.67)	(400.30)
685,179	3,059.26	2,683.45	(12.28)	2,895.00	164.27	(211.55)
759,276	2,335.19	2,048.39	(12.28)	2,323.45	11.74	(275.07)
91,046	1,015.23	890.55	(12.28)	1,315.01	(299.78)	(424.46)
616,139	2,600.70	2,281.35	(12.28)	2,687.39	(86.68)	(406.03)
1,304,233	3,947.28	3,462.64	(12.28)	4,306.22	(358.95)	(843.58)



**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
1,229,204	580.16	508.97	(12.27)	1,201.31	(621.15)	(692.34)
61,696	2,208.79	1,937.80	(12.27)	2,577.32	(368.53)	(639.52)
585,581	4,736.26	4,155.20	(12.27)	5,445.87	(709.61)	(1,290.67)
343,862	4,135.60	3,628.50	(12.26)	4,194.62	(59.02)	(566.13)
366,992	503.22	441.55	(12.25)	479.95	23.26	(38.40)
438,553	4,222.83	3,705.45	(12.25)	4,240.87	(18.05)	(535.42)
143,834	3,168.51	2,780.31	(12.25)	3,021.03	147.47	(240.72)
31,707	4,867.13	4,270.85	(12.25)	5,068.03	(200.89)	(797.17)
381,544	10,710.94	9,399.04	(12.25)	11,814.16	(1,103.23)	(2,415.12)
776,191	1,855.39	1,628.22	(12.24)	1,762.73	92.65	(134.51)
330,477	12,788.54	11,223.57	(12.24)	12,288.58	499.96	(1,065.01)
1,074,203	4,395.72	3,857.85	(12.24)	4,242.47	153.25	(384.62)
1,303,174	2,845.25	2,497.13	(12.24)	3,073.89	(228.64)	(576.76)
891,137	2,343.88	2,057.10	(12.23)	2,217.07	126.80	(159.97)
1,110,298	4,538.30	3,983.15	(12.23)	4,328.35	209.95	(345.20)
310,035	684.55	600.82	(12.23)	1,243.18	(558.63)	(642.36)
638,848	2,303.02	2,021.35	(12.23)	2,284.74	18.28	(263.39)
697,210	1,864.38	1,636.77	(12.21)	1,830.86	33.53	(194.09)
487,197	2,072.98	1,819.98	(12.20)	1,968.98	104.00	(149.00)
832,360	2,556.77	2,244.75	(12.20)	3,127.96	(571.19)	(883.21)
842,850	3,090.73	2,713.55	(12.20)	3,108.30	(17.57)	(394.74)
273,216	3,450.83	3,029.72	(12.20)	3,261.58	189.25	(231.86)
503,158	2,897.97	2,544.34	(12.20)	2,981.12	(83.16)	(436.79)
1,180,053	978.10	858.78	(12.20)	1,647.72	(669.62)	(788.94)
924,864	3,326.69	2,921.15	(12.19)	3,160.02	166.67	(238.87)
1,136,773	3,063.40	2,690.02	(12.19)	3,172.83	(109.43)	(482.82)
1,290,856	4,319.73	3,793.42	(12.18)	4,507.87	(188.15)	(714.45)
425,877	2,796.40	2,455.71	(12.18)	2,937.90	(141.50)	(482.19)
890,756	3,518.03	3,089.43	(12.18)	3,772.96	(254.93)	(683.53)
666,837	3,073.19	2,698.89	(12.18)	3,143.47	(70.29)	(444.58)
1,032,361	1,016.77	892.96	(12.18)	1,933.63	(916.86)	(1,040.68)
962,261	2,631.46	2,311.08	(12.18)	2,730.70	(99.24)	(419.62)
1,396,892	3,651.84	3,207.33	(12.17)	3,861.09	(209.26)	(653.77)
276,733	2,381.55	2,091.74	(12.17)	2,507.70	(126.15)	(415.96)
457,081	3,442.45	3,023.75	(12.16)	3,885.02	(442.57)	(861.27)
619,676	2,838.95	2,493.68	(12.16)	2,971.92	(132.97)	(478.24)
1,010,666	1,037.23	911.11	(12.16)	1,656.25	(619.02)	(745.15)
878,763	2,779.17	2,441.26	(12.16)	2,801.39	(22.21)	(360.13)
124,497	3,023.43	2,655.86	(12.16)	3,148.04	(124.61)	(492.18)
1,021,091	3,377.30	2,966.73	(12.16)	3,897.60	(520.30)	(930.88)
65,153	4,211.60	3,699.68	(12.15)	4,211.01	0.59	(511.33)
608,717	3,629.21	3,188.30	(12.15)	3,492.76	136.45	(304.46)
1,022,061	827.96	727.38	(12.15)	831.65	(3.69)	(104.27)
94,328	2,715.47	2,385.62	(12.15)	2,833.71	(118.24)	(448.09)
983,261	3,731.78	3,278.98	(12.13)	4,898.96	(1,167.18)	(1,619.98)
465,972	2,476.80	2,176.30	(12.13)	2,347.29	129.51	(170.99)
61,440	2,366.90	2,079.76	(12.13)	2,432.36	(65.46)	(352.60)
609,212	938.39	824.55	(12.13)	1,231.73	(293.34)	(407.18)
362,819	1,879.36	1,651.37	(12.13)	2,085.40	(206.04)	(434.03)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
1,179,632	3,035.99	2,667.68	(12.13)	3,046.93	(10.94)	(379.24)
619,757	2,548.04	2,239.00	(12.13)	2,436.92	111.12	(197.93)
1,149,894	3,310.32	2,908.84	(12.13)	5,171.20	(1,860.88)	(2,262.36)
550,410	2,588.59	2,274.70	(12.13)	2,515.55	73.04	(240.85)
1,010,540	2,849.47	2,504.01	(12.12)	3,229.91	(380.44)	(725.90)
29,829	3,612.52	3,174.63	(12.12)	4,013.33	(400.81)	(838.70)
286,229	3,363.03	2,955.40	(12.12)	3,247.09	115.94	(291.69)
781,488	5,458.35	4,796.88	(12.12)	5,656.79	(198.44)	(859.91)
255,262	2,612.89	2,296.47	(12.11)	2,697.08	(84.19)	(400.62)
982,773	8,069.94	7,092.84	(12.11)	8,176.48	(106.54)	(1,083.64)
43,243	3,767.05	3,311.00	(12.11)	4,221.04	(453.99)	(910.04)
220,440	3,555.09	3,124.76	(12.10)	4,075.31	(520.22)	(950.54)
225,970	4,500.07	3,955.36	(12.10)	4,453.92	46.14	(498.56)
582,413	3,379.46	2,970.64	(12.10)	3,250.82	128.64	(280.18)
800,329	2,927.32	2,573.28	(12.09)	2,830.91	96.41	(257.63)
927,813	2,385.19	2,096.81	(12.09)	2,269.44	115.76	(172.62)
127,312	3,306.61	2,906.92	(12.09)	3,585.67	(279.05)	(678.75)
935,000	1,054.69	927.31	(12.08)	2,200.72	(1,146.03)	(1,273.41)
173,028	3,025.81	2,660.38	(12.08)	3,364.70	(338.89)	(704.32)
559,976	1,000.37	879.58	(12.07)	1,407.99	(407.62)	(528.40)
363,029	3,708.24	3,260.59	(12.07)	3,597.80	110.44	(337.22)
1,199,019	3,897.16	3,426.73	(12.07)	3,960.78	(63.61)	(534.05)
1,092,155	4,192.84	3,686.73	(12.07)	4,111.69	81.15	(424.96)
721,126	809.95	712.18	(12.07)	1,222.29	(412.34)	(510.11)
852,410	602.18	529.50	(12.07)	1,353.88	(751.70)	(824.38)
733,073	2,318.06	2,038.34	(12.07)	2,740.46	(422.40)	(702.12)
287,875	2,071.49	1,821.55	(12.07)	1,950.94	120.55	(129.39)
220,771	3,150.73	2,770.64	(12.06)	3,454.28	(303.55)	(683.64)
849,168	488.74	429.81	(12.06)	463.61	25.13	(33.79)
883,037	2,331.02	2,050.06	(12.05)	2,475.78	(144.76)	(425.72)
873,588	1,033.38	908.85	(12.05)	1,084.04	(50.66)	(175.20)
919,807	1,025.31	901.78	(12.05)	1,271.05	(245.74)	(369.27)
211,682	3,190.29	2,805.93	(12.05)	3,256.42	(66.14)	(450.50)
977,277	3,042.32	2,675.81	(12.05)	3,112.08	(69.76)	(436.27)
840,145	2,206.18	1,940.40	(12.05)	2,213.03	(6.85)	(272.63)
1,137,224	3,681.38	3,237.92	(12.05)	4,264.08	(582.70)	(1,026.16)
215,384	3,882.42	3,414.80	(12.04)	4,159.33	(276.91)	(744.53)
8,983	2,487.50	2,187.91	(12.04)	2,585.11	(97.61)	(397.20)
480,296	2,435.00	2,141.73	(12.04)	2,435.25	(0.25)	(293.52)
1,118,123	2,416.06	2,125.25	(12.04)	2,587.56	(171.50)	(462.31)
1,057,871	1,037.23	912.38	(12.04)	1,156.57	(119.35)	(244.19)
325,145	1,764.84	1,552.43	(12.04)	1,817.52	(52.68)	(265.09)
602,657	3,339.74	2,937.84	(12.03)	3,818.96	(479.22)	(881.12)
508,286	2,617.05	2,302.18	(12.03)	2,841.26	(224.21)	(539.09)
190,126	1,628.77	1,432.81	(12.03)	1,687.59	(58.82)	(254.78)
615,269	2,309.85	2,031.96	(12.03)	2,261.06	48.79	(229.10)
1,108,651	3,155.23	2,775.69	(12.03)	3,310.71	(155.47)	(535.02)
512,611	2,771.14	2,437.85	(12.03)	3,041.35	(270.21)	(603.50)
707,978	2,757.17	2,425.56	(12.03)	2,791.66	(34.49)	(366.10)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
111,823	2,635.74	2,318.74	(12.03)	2,633.24	2.50	(314.50)
390,487	838.25	737.44	(12.03)	1,428.85	(590.60)	(691.41)
755,527	3,870.83	3,405.58	(12.02)	3,750.79	120.04	(345.21)
790,597	2,241.57	1,972.17	(12.02)	2,611.87	(370.29)	(639.70)
1,043,981	995.53	875.89	(12.02)	1,728.72	(733.19)	(852.83)
990,064	1,015.23	893.26	(12.01)	1,615.28	(600.05)	(722.03)
506,584	2,369.55	2,084.89	(12.01)	2,249.75	119.79	(164.87)
719,883	1,041.60	916.51	(12.01)	1,739.55	(697.95)	(823.04)
1,359,811	3,784.78	3,330.39	(12.01)	3,877.27	(92.49)	(546.88)
404,985	2,094.53	1,843.11	(12.00)	2,101.58	(7.05)	(258.47)
574,319	2,358.04	2,075.04	(12.00)	2,271.25	86.79	(196.21)
563,790	3,238.66	2,849.98	(12.00)	3,273.37	(34.71)	(423.38)
416,764	3,276.01	2,883.01	(12.00)	3,657.31	(381.29)	(774.29)
371,241	3,565.07	3,137.42	(12.00)	3,595.18	(30.11)	(457.76)
1,290,508	700.66	616.65	(11.99)	1,053.74	(353.08)	(437.09)
145,803	946.15	832.71	(11.99)	1,619.18	(673.04)	(786.47)
958,413	3,422.64	3,012.43	(11.99)	3,402.19	20.45	(389.76)
405,621	2,862.01	2,519.00	(11.98)	3,050.70	(188.69)	(531.70)
770,971	942.63	829.67	(11.98)	1,592.90	(650.27)	(763.23)
1,194,066	4,470.19	3,934.53	(11.98)	4,456.27	13.91	(521.75)
1,413,392	2,078.25	1,829.22	(11.98)	1,966.54	111.71	(137.31)
99,872	742.25	653.32	(11.98)	1,023.30	(281.05)	(369.99)
576,833	2,777.83	2,445.16	(11.98)	2,873.19	(95.36)	(428.03)
1,356,982	3,291.21	2,897.21	(11.97)	3,286.13	5.07	(388.92)
1,193,957	3,638.64	3,203.16	(11.97)	3,964.04	(325.40)	(760.89)
46,274	1,971.84	1,735.86	(11.97)	2,730.22	(758.38)	(994.36)
741,368	3,180.43	2,799.85	(11.97)	3,109.68	70.76	(309.83)
1,168,490	2,838.96	2,499.23	(11.97)	3,185.40	(346.44)	(686.16)
987,694	3,182.95	2,802.17	(11.96)	3,305.47	(122.53)	(503.31)
223,194	668.41	588.46	(11.96)	1,169.63	(501.22)	(581.17)
721,892	3,086.99	2,717.76	(11.96)	3,064.51	22.47	(346.75)
1,396,902	3,661.82	3,223.88	(11.96)	3,918.67	(256.85)	(694.80)
1,157,068	3,815.57	3,359.31	(11.96)	3,828.10	(12.53)	(468.79)
108,047	2,839.75	2,500.37	(11.95)	2,868.28	(28.52)	(367.90)
773,910	953.44	839.51	(11.95)	1,389.45	(436.00)	(549.93)
1,004,772	921.99	811.83	(11.95)	1,311.57	(389.58)	(499.74)
109,838	2,455.24	2,161.91	(11.95)	2,723.83	(268.59)	(561.92)
1,076,924	3,208.22	2,824.96	(11.95)	3,066.99	141.23	(242.03)
955,650	3,697.03	3,255.44	(11.94)	3,787.50	(90.47)	(532.06)
206,972	3,387.39	2,982.78	(11.94)	3,379.92	7.46	(397.14)
831,012	4,706.88	4,144.70	(11.94)	6,554.06	(1,847.18)	(2,409.36)
74,771	3,869.24	3,407.22	(11.94)	4,336.04	(466.80)	(928.82)
439,917	4,507.65	3,969.46	(11.94)	5,561.30	(1,053.66)	(1,591.85)
803,230	963.04	848.06	(11.94)	1,767.39	(804.34)	(919.32)
1,007,955	4,511.08	3,972.83	(11.93)	4,998.30	(487.22)	(1,025.46)
363,520	3,545.49	3,122.88	(11.92)	3,350.93	194.56	(228.05)
1,172,908	892.20	785.86	(11.92)	1,777.19	(884.99)	(991.33)
879,476	4,031.74	3,551.38	(11.91)	4,781.34	(749.60)	(1,229.96)
29,164	2,553.00	2,248.87	(11.91)	2,681.61	(128.61)	(432.74)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
7,024	2,354.90	2,074.43	(11.91)	2,841.58	(486.68)	(767.15)
102,149	4,626.62	4,075.60	(11.91)	4,940.56	(313.94)	(864.96)
533,925	6,476.11	5,705.09	(11.91)	7,024.84	(548.73)	(1,319.75)
696,154	4,275.35	3,766.35	(11.91)	4,331.89	(56.54)	(565.54)
732,696	2,735.46	2,409.80	(11.90)	2,753.34	(17.88)	(343.53)
108,746	2,338.56	2,060.22	(11.90)	2,376.05	(37.49)	(315.83)
27,898	776.51	684.11	(11.90)	1,030.52	(254.01)	(346.40)
1,146,334	1,034.96	911.85	(11.90)	2,195.31	(1,160.35)	(1,283.46)
581,183	5,989.93	5,277.63	(11.89)	6,210.89	(220.96)	(933.26)
58,604	2,424.42	2,136.13	(11.89)	2,553.60	(129.18)	(417.47)
814,518	3,597.02	3,169.33	(11.89)	3,722.27	(125.25)	(552.93)
321,626	2,865.25	2,524.59	(11.89)	3,151.27	(286.02)	(626.68)
1,031,724	3,012.63	2,654.45	(11.89)	3,022.11	(9.49)	(367.66)
1,042,455	4,211.85	3,711.12	(11.89)	4,409.11	(197.26)	(698.00)
443,800	893.19	787.04	(11.88)	1,250.92	(357.73)	(463.89)
201,079	4,488.31	3,955.22	(11.88)	4,444.58	43.73	(489.36)
1,121,645	2,393.38	2,109.24	(11.87)	2,453.38	(60.00)	(344.14)
454,435	2,073.31	1,827.24	(11.87)	2,270.93	(197.63)	(443.70)
514,091	2,436.52	2,147.36	(11.87)	2,535.23	(98.71)	(387.87)
246,244	2,557.76	2,254.28	(11.87)	2,685.07	(127.31)	(430.80)
484,447	3,360.22	2,961.54	(11.86)	3,843.85	(483.63)	(882.30)
1,081,021	1,083.18	954.72	(11.86)	1,352.67	(269.49)	(397.95)
400,432	1,001.38	882.67	(11.86)	1,269.49	(268.11)	(386.82)
1,078,865	3,501.18	3,086.13	(11.85)	3,672.61	(171.43)	(586.48)
309,916	1,071.93	944.87	(11.85)	1,012.84	59.08	(67.97)
654,837	921.83	812.59	(11.85)	1,072.33	(150.50)	(259.74)
1,161,644	2,707.69	2,386.82	(11.85)	2,884.34	(176.65)	(497.52)
1,064,301	3,941.99	3,475.00	(11.85)	3,775.51	166.48	(300.51)
544,960	1,015.36	895.10	(11.84)	1,221.14	(205.78)	(326.04)
1,140,390	2,386.09	2,103.51	(11.84)	2,807.73	(421.63)	(704.21)
23,615	2,409.99	2,124.62	(11.84)	2,603.37	(193.38)	(478.75)
511,656	1,031.57	909.42	(11.84)	1,667.40	(635.83)	(757.98)
318,972	1,315.27	1,159.52	(11.84)	1,304.85	10.42	(145.33)
704,211	2,168.50	1,911.74	(11.84)	2,212.15	(43.66)	(300.41)
863,470	3,600.89	3,174.57	(11.84)	3,543.85	57.05	(369.28)
711,214	3,188.04	2,810.62	(11.84)	3,305.55	(117.51)	(494.93)
422,194	3,970.22	3,500.21	(11.84)	3,821.26	148.96	(321.04)
537,397	4,062.69	3,581.77	(11.84)	3,871.74	190.95	(289.97)
1,232,763	3,733.72	3,291.79	(11.84)	3,631.80	101.92	(340.01)
757,634	928.83	818.90	(11.84)	1,343.87	(415.04)	(524.97)
953,444	5,035.94	4,439.98	(11.83)	4,991.20	44.75	(551.21)
1,074,819	3,170.71	2,795.63	(11.83)	3,316.80	(146.09)	(521.17)
78,642	4,117.35	3,630.36	(11.83)	4,260.38	(143.04)	(630.03)
1,054,086	4,049.49	3,570.64	(11.83)	4,149.15	(99.65)	(578.51)
345,935	1,873.82	1,652.40	(11.82)	1,765.86	107.96	(113.46)
854,678	2,349.34	2,071.73	(11.82)	2,523.68	(174.34)	(451.94)
1,406,646	5,826.78	5,138.29	(11.82)	5,726.20	100.58	(587.91)
975,698	3,155.86	2,782.97	(11.82)	3,210.92	(55.07)	(427.96)
486,259	2,494.55	2,199.85	(11.81)	2,737.56	(243.00)	(537.71)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
1,137,755	1,024.16	903.19	(11.81)	968.78	55.38	(65.58)
863,266	1,872.25	1,651.13	(11.81)	1,777.14	95.11	(126.01)
1,191,405	2,310.61	2,037.81	(11.81)	2,239.72	70.89	(201.90)
258,784	2,444.33	2,155.81	(11.80)	2,548.78	(104.45)	(392.97)
812,801	1,961.43	1,729.91	(11.80)	2,195.96	(234.53)	(466.05)
1,269,813	2,224.19	1,961.67	(11.80)	2,376.51	(152.32)	(414.84)
74,498	1,068.14	942.08	(11.80)	1,760.10	(691.96)	(818.03)
570,905	2,664.06	2,349.74	(11.80)	2,744.51	(80.46)	(394.77)
172,154	2,161.84	1,906.80	(11.80)	2,192.04	(30.20)	(285.25)
16,732	2,780.85	2,452.78	(11.80)	3,214.94	(434.09)	(762.16)
185,884	3,406.56	3,004.75	(11.80)	3,306.24	100.32	(301.49)
915,096	2,502.86	2,207.65	(11.79)	2,370.91	131.95	(163.25)
673,623	2,686.67	2,369.79	(11.79)	2,720.00	(33.34)	(350.21)
396,059	3,026.70	2,669.73	(11.79)	3,001.94	24.77	(332.21)
1,289,127	990.29	873.50	(11.79)	1,811.36	(821.07)	(937.86)
810,078	2,198.64	1,939.39	(11.79)	2,304.28	(105.64)	(364.89)
478,359	3,920.11	3,458.08	(11.79)	4,375.43	(455.32)	(917.35)
1,029,274	2,134.32	1,882.84	(11.78)	2,572.30	(437.97)	(689.46)
1,148,603	2,084.40	1,838.83	(11.78)	1,980.60	103.81	(141.77)
899,762	1,882.14	1,660.41	(11.78)	1,790.89	91.25	(130.48)
478,854	2,518.46	2,221.76	(11.78)	2,915.25	(396.79)	(693.49)
639,519	2,081.41	1,836.24	(11.78)	1,966.77	114.63	(130.54)
174,577	1,839.08	1,622.45	(11.78)	1,855.63	(16.55)	(233.17)
1,249,024	2,894.56	2,553.61	(11.78)	3,045.20	(150.64)	(491.59)
1,058,625	698.45	616.21	(11.77)	1,258.43	(559.98)	(642.22)
40,751	3,169.63	2,796.43	(11.77)	3,080.81	88.82	(284.38)
1,266,388	1,791.31	1,580.40	(11.77)	1,896.92	(105.61)	(316.52)
817,936	1,067.02	941.41	(11.77)	1,680.39	(613.38)	(738.99)
563,127	1,076.27	949.61	(11.77)	1,640.39	(564.12)	(690.78)
587,410	3,005.09	2,651.46	(11.77)	2,936.55	68.54	(285.09)
1,286,956	4,064.14	3,585.97	(11.77)	4,018.50	45.64	(432.52)
504,841	3,109.93	2,744.05	(11.76)	3,095.29	14.64	(351.24)
877,529	2,759.37	2,434.84	(11.76)	2,754.90	4.46	(320.06)
202,968	4,035.09	3,560.60	(11.76)	3,865.07	170.02	(304.48)
451,756	3,560.09	3,141.48	(11.76)	3,368.39	191.70	(226.92)
555,200	832.94	735.03	(11.75)	1,399.21	(566.28)	(664.18)
471,208	2,918.39	2,575.39	(11.75)	2,815.77	102.62	(240.38)
305,340	4,195.37	3,702.38	(11.75)	4,904.53	(709.16)	(1,202.15)
845,378	3,216.12	2,838.30	(11.75)	3,448.54	(232.42)	(610.24)
93,699	2,701.72	2,384.37	(11.75)	3,108.31	(406.58)	(723.94)
565,064	2,697.44	2,380.61	(11.75)	2,672.70	24.74	(292.09)
38,467	573.58	506.25	(11.74)	919.44	(345.86)	(413.20)
677,351	3,841.29	3,390.38	(11.74)	3,719.92	121.37	(329.53)
1,356,628	5,497.63	4,852.46	(11.74)	5,377.40	120.24	(524.93)
156,202	1,620.67	1,430.55	(11.73)	1,782.69	(162.02)	(352.14)
1,212,252	3,460.12	3,054.36	(11.73)	3,664.35	(204.23)	(609.99)
354,187	2,341.32	2,066.78	(11.73)	2,260.14	81.18	(193.36)
437,013	1,021.46	901.69	(11.73)	1,682.53	(661.06)	(780.83)
937,669	3,571.65	3,152.98	(11.72)	4,057.20	(485.55)	(904.22)



**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
1,251,295	2,303.50	2,033.57	(11.72)	2,396.01	(92.51)	(362.44)
1,384,558	1,853.54	1,636.39	(11.72)	1,777.03	76.51	(140.64)
727,613	2,816.30	2,486.44	(11.71)	2,876.42	(60.11)	(389.97)
996,698	2,890.85	2,552.31	(11.71)	3,356.94	(466.09)	(804.63)
811,871	1,019.71	900.30	(11.71)	1,192.58	(172.87)	(292.28)
99,847	4,613.15	4,073.13	(11.71)	4,547.47	65.68	(474.34)
591,285	3,894.02	3,438.21	(11.71)	4,288.64	(394.62)	(850.44)
987,033	2,031.38	1,793.61	(11.70)	2,081.97	(50.59)	(288.36)
495,936	3,925.76	3,466.35	(11.70)	3,878.84	46.92	(412.50)
586,443	3,907.41	3,450.15	(11.70)	3,780.88	126.53	(330.73)
1,103,203	3,312.82	2,925.28	(11.70)	3,398.27	(85.44)	(472.99)
1,141,489	1,083.35	956.62	(11.70)	1,627.05	(543.70)	(670.43)
248,948	2,905.95	2,566.02	(11.70)	2,841.68	64.27	(275.66)
1,215,718	3,360.86	2,967.72	(11.70)	3,456.83	(95.98)	(489.11)
114,838	3,804.76	3,359.80	(11.69)	3,840.31	(35.55)	(480.51)
227,502	3,190.27	2,817.19	(11.69)	3,358.92	(168.65)	(541.73)
269,565	809.93	715.22	(11.69)	1,648.56	(838.62)	(933.33)
848,996	3,106.68	2,743.46	(11.69)	3,412.98	(306.30)	(669.51)
1,051,380	1,905.31	1,682.57	(11.69)	2,123.04	(217.73)	(440.47)
516,477	2,324.17	2,052.50	(11.69)	2,476.29	(152.12)	(423.79)
585,195	2,587.06	2,284.78	(11.68)	2,760.12	(173.06)	(475.35)
296,089	3,742.28	3,305.04	(11.68)	3,936.53	(194.25)	(631.49)
183,058	1,051.05	928.32	(11.68)	1,362.57	(311.52)	(434.25)
358,311	1,681.38	1,485.06	(11.68)	1,608.21	73.17	(123.16)
1,053,713	1,926.79	1,701.82	(11.68)	2,211.80	(285.01)	(509.98)
1,105,724	2,317.40	2,046.86	(11.67)	2,338.26	(20.86)	(291.39)
371,231	634.18	560.15	(11.67)	1,272.73	(638.55)	(712.58)
1,377,761	674.74	596.03	(11.67)	844.78	(170.04)	(248.75)
1,322,565	4,016.81	3,548.24	(11.67)	3,793.87	222.94	(245.63)
604,797	3,292.89	2,908.93	(11.66)	3,317.87	(24.98)	(408.94)
304,283	4,344.12	3,837.61	(11.66)	4,099.68	244.44	(262.07)
1,377,675	4,172.17	3,685.99	(11.65)	4,492.94	(320.77)	(806.95)
1,134,870	2,657.48	2,347.86	(11.65)	2,603.08	54.40	(255.22)
883,467	2,699.39	2,385.04	(11.65)	2,677.78	21.60	(292.75)
113,858	3,889.16	3,436.30	(11.64)	4,085.91	(196.75)	(649.61)
1,394,606	2,118.97	1,872.27	(11.64)	2,010.16	108.80	(137.89)
1,012,482	979.36	865.35	(11.64)	1,860.39	(881.03)	(995.04)
968,501	7,962.96	7,036.55	(11.63)	8,125.55	(162.59)	(1,089.01)
285,858	3,146.96	2,781.10	(11.63)	3,336.54	(189.58)	(555.45)
685,574	3,664.02	3,238.18	(11.62)	3,486.73	177.28	(248.55)
110,236	1,664.10	1,470.70	(11.62)	1,705.24	(41.14)	(234.54)
1,264,392	3,344.88	2,956.16	(11.62)	3,322.77	22.11	(366.61)
238,492	3,531.81	3,121.51	(11.62)	3,956.99	(425.17)	(835.48)
1,313,832	3,083.38	2,725.19	(11.62)	3,289.86	(206.48)	(564.67)
1,036,045	3,237.43	2,861.49	(11.61)	3,061.81	175.62	(200.32)
1,232,155	3,091.44	2,732.61	(11.61)	3,599.62	(508.19)	(867.01)
764,389	855.29	756.02	(11.61)	1,397.92	(542.63)	(641.90)
77,263	4,033.71	3,565.66	(11.60)	3,909.99	123.71	(344.33)
1,187,776	3,514.16	3,106.41	(11.60)	3,636.72	(122.56)	(530.31)



**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
194,127	4,153.04	3,671.19	(11.60)	4,709.14	(556.10)	(1,037.95)
266,559	4,680.60	4,137.65	(11.60)	5,580.73	(900.13)	(1,443.08)
269,755	3,903.59	3,451.51	(11.58)	3,851.14	52.45	(399.63)
73,776	3,699.77	3,271.40	(11.58)	4,357.99	(658.22)	(1,086.59)
647,232	3,225.93	2,852.45	(11.58)	3,162.13	63.80	(309.68)
146,089	3,608.15	3,190.53	(11.57)	3,662.25	(54.10)	(471.72)
788,510	797.81	705.53	(11.57)	901.24	(103.43)	(195.71)
973,293	3,155.00	2,790.08	(11.57)	3,590.61	(435.61)	(800.53)
107,431	2,411.59	2,132.73	(11.56)	2,351.66	59.93	(218.93)
555,648	3,956.85	3,499.49	(11.56)	3,805.91	150.94	(306.42)
699,569	749.88	663.22	(11.56)	1,035.69	(285.81)	(372.48)
959,638	2,345.84	2,074.79	(11.55)	2,619.24	(273.40)	(544.45)
1,391,344	3,275.19	2,896.84	(11.55)	3,703.56	(428.36)	(806.71)
1,272,356	2,861.97	2,531.38	(11.55)	2,756.60	105.36	(225.22)
865,085	2,805.76	2,481.78	(11.55)	2,797.78	7.98	(316.00)
852,449	1,040.61	920.46	(11.55)	1,405.58	(364.97)	(485.12)
1,366,431	5,549.44	4,908.72	(11.55)	5,437.00	112.44	(528.28)
840,407	2,876.67	2,544.59	(11.54)	3,375.33	(498.67)	(830.75)
331,578	1,034.29	914.96	(11.54)	1,680.14	(645.85)	(765.18)
68,156	829.31	733.64	(11.54)	926.39	(97.09)	(192.75)
297,461	4,101.52	3,628.45	(11.53)	3,899.41	202.10	(270.96)
77,565	5,094.50	4,507.06	(11.53)	5,182.92	(88.41)	(675.86)
1,375,831	886.75	784.51	(11.53)	1,066.63	(179.88)	(282.12)
353,549	3,732.98	3,302.68	(11.53)	3,872.41	(139.43)	(569.74)
147,722	2,333.68	2,064.70	(11.53)	2,531.94	(198.26)	(467.24)
737,045	952.75	842.95	(11.52)	1,432.31	(479.55)	(589.35)
813,895	1,003.10	887.52	(11.52)	1,260.85	(257.74)	(373.33)
806,604	1,975.21	1,747.64	(11.52)	2,096.50	(121.29)	(348.86)
757,014	638.30	564.77	(11.52)	1,472.77	(834.47)	(908.00)
53,130	2,450.19	2,167.96	(11.52)	2,795.54	(345.36)	(627.58)
1,119,444	2,235.97	1,978.55	(11.51)	2,688.51	(452.53)	(709.95)
777,916	1,820.88	1,611.30	(11.51)	1,933.31	(112.43)	(322.01)
663,329	1,637.30	1,448.89	(11.51)	1,568.98	68.32	(120.09)
587,320	384.69	340.43	(11.51)	429.94	(45.25)	(89.52)
969,549	3,932.11	3,479.70	(11.51)	4,035.18	(103.07)	(555.48)
1,170,778	3,382.11	2,993.07	(11.50)	3,476.12	(94.01)	(483.05)
1,069,541	4,468.69	3,954.90	(11.50)	4,223.11	245.58	(268.21)
512,434	3,024.30	2,676.57	(11.50)	2,952.05	72.25	(275.47)
733,450	2,854.91	2,526.83	(11.49)	2,737.51	117.40	(210.68)
394,604	917.64	812.24	(11.49)	1,801.72	(884.08)	(989.48)
470,149	4,354.88	3,854.74	(11.48)	4,209.40	145.48	(354.66)
214,868	3,492.12	3,091.15	(11.48)	3,318.17	173.95	(227.02)
956,967	3,053.36	2,702.86	(11.48)	3,089.95	(36.59)	(387.09)
168,825	3,935.06	3,483.38	(11.48)	4,407.06	(472.00)	(923.68)
711,868	3,049.48	2,699.47	(11.48)	3,422.21	(372.73)	(722.74)
728,806	3,159.40	2,796.91	(11.47)	3,133.52	25.87	(336.62)
9,284	2,411.41	2,134.76	(11.47)	2,692.15	(280.74)	(557.38)
871,040	3,522.12	3,118.07	(11.47)	3,400.39	121.73	(282.33)
1,410,726	4,736.31	4,193.09	(11.47)	5,102.85	(366.54)	(909.76)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
1,258,377	3,314.84	2,934.74	(11.47)	3,399.36	(84.52)	(464.62)
1,305,763	3,028.69	2,681.44	(11.47)	2,931.82	96.87	(250.37)
1,171,912	4,254.38	3,766.64	(11.46)	4,092.20	162.18	(325.56)
1,033,375	3,170.12	2,806.75	(11.46)	3,301.57	(131.45)	(494.82)
827,661	3,018.14	2,672.26	(11.46)	3,282.48	(264.35)	(610.22)
320,712	2,369.56	2,098.02	(11.46)	2,309.03	60.54	(211.01)
546,420	1,063.21	941.48	(11.45)	1,710.56	(647.34)	(769.08)
993,423	493.15	436.69	(11.45)	524.96	(31.81)	(88.27)
928,158	2,122.69	1,879.71	(11.45)	2,067.48	55.22	(187.77)
771,347	4,150.64	3,675.67	(11.44)	4,021.69	128.96	(346.02)
338,202	3,945.93	3,494.74	(11.43)	4,418.28	(472.35)	(923.54)
1,056,549	2,187.67	1,937.71	(11.43)	2,312.21	(124.54)	(374.50)
1,111,119	725.44	642.57	(11.42)	1,316.86	(591.42)	(674.30)
1,382,472	1,077.07	954.07	(11.42)	1,652.55	(575.48)	(698.49)
814,366	2,948.83	2,612.09	(11.42)	3,071.22	(122.39)	(459.13)
176,158	2,264.23	2,005.73	(11.42)	2,340.72	(76.49)	(334.99)
1,376,236	2,924.43	2,590.56	(11.42)	3,148.97	(224.54)	(558.41)
768,903	3,331.33	2,951.27	(11.41)	3,832.90	(501.57)	(881.62)
454,053	640.31	567.26	(11.41)	1,174.87	(534.56)	(607.61)
388,048	1,680.26	1,488.58	(11.41)	1,600.82	79.44	(112.24)
1,369,128	2,780.85	2,463.67	(11.41)	2,702.50	78.36	(238.82)
917,646	2,111.89	1,871.01	(11.41)	2,228.08	(116.19)	(357.06)
822,562	3,573.80	3,166.23	(11.40)	4,123.56	(549.76)	(957.33)
380,009	4,210.81	3,730.62	(11.40)	4,418.60	(207.79)	(687.97)
882,475	2,320.52	2,055.90	(11.40)	2,504.38	(183.86)	(448.48)
1,394,157	2,567.19	2,274.46	(11.40)	2,570.05	(2.86)	(295.59)
978,673	3,236.67	2,867.61	(11.40)	3,068.00	168.67	(200.39)
1,261,253	790.43	700.33	(11.40)	1,054.29	(263.86)	(353.96)
288,986	3,315.79	2,937.96	(11.39)	3,488.56	(172.77)	(550.60)
576,239	3,695.02	3,274.00	(11.39)	3,753.27	(58.25)	(479.28)
752,526	2,238.77	1,983.74	(11.39)	2,217.67	21.10	(233.93)
920,951	2,062.94	1,827.99	(11.39)	2,093.96	(31.02)	(265.97)
165,986	2,309.01	2,046.10	(11.39)	2,472.63	(163.61)	(426.53)
389,230	3,205.86	2,840.89	(11.38)	3,160.03	45.83	(319.14)
1,180,042	4,207.71	3,728.78	(11.38)	3,979.50	228.21	(250.72)
130,897	2,766.58	2,451.88	(11.37)	2,725.08	41.50	(273.20)
613,382	3,056.88	2,709.17	(11.37)	3,113.12	(56.23)	(403.95)
506,368	2,188.15	1,939.26	(11.37)	2,205.83	(17.68)	(266.57)
97,340	1,075.87	953.50	(11.37)	1,476.53	(400.66)	(523.02)
1,234,207	3,041.99	2,696.23	(11.37)	3,306.54	(264.55)	(610.31)
90,120	3,849.33	3,411.82	(11.37)	4,187.74	(338.41)	(775.92)
675,568	1,079.48	956.82	(11.36)	2,068.11	(988.64)	(1,111.30)
362,831	2,786.33	2,469.73	(11.36)	3,290.25	(503.91)	(820.52)
954,747	3,807.21	3,374.64	(11.36)	3,943.05	(135.85)	(568.42)
1,408,626	3,405.37	3,018.48	(11.36)	3,684.71	(279.35)	(666.23)
1,179,342	3,886.86	3,445.28	(11.36)	4,001.06	(114.21)	(555.78)
704,067	2,960.57	2,624.39	(11.36)	3,137.02	(176.46)	(512.64)
1,274,075	835.79	740.89	(11.35)	1,288.14	(452.35)	(547.25)
1,181,343	2,990.01	2,650.55	(11.35)	3,035.27	(45.26)	(384.72)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
361,966	4,137.05	3,667.39	(11.35)	4,251.57	(114.52)	(584.18)
105,177	4,273.44	3,788.49	(11.35)	4,343.98	(70.54)	(555.49)
887,036	2,935.82	2,602.71	(11.35)	2,915.58	20.24	(312.87)
1,220,983	3,987.24	3,534.92	(11.34)	4,211.60	(224.36)	(676.69)
205,955	2,182.41	1,934.84	(11.34)	2,492.03	(309.61)	(557.18)
232,715	2,261.91	2,005.35	(11.34)	2,399.63	(137.72)	(394.28)
759,292	741.54	657.46	(11.34)	1,440.11	(698.57)	(782.65)
820,905	5,436.28	4,820.00	(11.34)	5,830.86	(394.59)	(1,010.86)
818,105	3,470.15	3,076.85	(11.33)	3,624.67	(154.53)	(547.83)
321,674	2,017.08	1,788.51	(11.33)	2,028.55	(11.47)	(240.04)
807,216	975.34	864.85	(11.33)	1,679.91	(704.57)	(815.05)
695,083	2,467.54	2,188.04	(11.33)	2,844.15	(376.61)	(656.10)
203,327	2,268.95	2,011.95	(11.33)	2,391.28	(122.33)	(379.33)
880,075	2,258.63	2,002.82	(11.33)	2,158.96	99.68	(156.14)
804,408	3,114.74	2,762.04	(11.32)	3,070.38	44.36	(308.34)
1,173,841	4,303.92	3,816.60	(11.32)	4,778.63	(474.71)	(962.03)
215,976	1,035.69	918.42	(11.32)	1,871.86	(836.18)	(953.44)
366,171	3,109.98	2,757.91	(11.32)	4,105.02	(995.04)	(1,347.11)
1,237,583	5,039.00	4,468.70	(11.32)	5,221.02	(182.02)	(752.32)
1,131,780	2,024.85	1,795.70	(11.32)	2,029.54	(4.69)	(233.84)
70,140	4,347.31	3,855.38	(11.32)	4,139.26	208.04	(283.88)
1,215,179	3,981.70	3,531.20	(11.31)	3,817.32	164.38	(286.12)
865,238	2,780.71	2,466.23	(11.31)	2,794.28	(13.57)	(328.05)
332,574	4,048.30	3,590.47	(11.31)	3,968.10	80.19	(377.63)
635,471	2,830.37	2,510.28	(11.31)	3,005.38	(175.01)	(495.10)
1,046,970	2,939.96	2,607.66	(11.30)	2,891.47	48.48	(283.81)
721,883	2,889.94	2,563.38	(11.30)	2,779.70	110.24	(216.33)
536,853	4,249.03	3,769.06	(11.30)	4,400.62	(151.59)	(631.56)
789,834	4,776.36	4,236.84	(11.30)	4,756.45	19.91	(519.61)
76,184	5,709.32	5,064.49	(11.29)	6,156.69	(447.37)	(1,092.20)
46,053	2,315.42	2,053.92	(11.29)	2,350.12	(34.69)	(296.20)
511,296	3,077.92	2,730.40	(11.29)	3,095.04	(17.12)	(364.63)
625,901	2,004.95	1,778.63	(11.29)	1,897.36	107.59	(118.73)
778,886	2,589.76	2,297.45	(11.29)	2,605.00	(15.24)	(307.55)
429,134	3,529.10	3,130.81	(11.29)	3,485.75	43.35	(354.94)
222,384	2,968.69	2,633.67	(11.29)	3,578.74	(610.05)	(945.07)
552,062	993.24	881.19	(11.28)	978.53	14.71	(97.34)
643,684	3,708.60	3,290.21	(11.28)	4,067.93	(359.33)	(777.72)
379,783	2,985.25	2,648.48	(11.28)	3,622.99	(637.75)	(974.51)
884,714	1,895.97	1,682.14	(11.28)	1,925.02	(29.04)	(242.88)
858,427	1,044.57	926.76	(11.28)	1,488.03	(443.47)	(561.27)
281,464	2,001.01	1,775.45	(11.27)	2,148.08	(147.07)	(372.64)
1,245,860	2,228.72	1,977.69	(11.26)	2,529.10	(300.38)	(551.41)
551,542	2,215.22	1,965.77	(11.26)	2,408.75	(193.53)	(442.98)
244,924	1,985.72	1,762.17	(11.26)	2,079.04	(93.32)	(316.87)
138,433	3,495.77	3,102.27	(11.26)	3,522.62	(26.84)	(420.35)
515,254	2,796.67	2,481.87	(11.26)	2,990.05	(193.38)	(508.18)
1,414,701	5,977.97	5,305.50	(11.25)	6,079.51	(101.54)	(774.01)
746,247	2,666.07	2,366.23	(11.25)	2,685.86	(19.79)	(319.63)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
1,153,307	3,298.09	2,927.26	(11.24)	3,544.45	(246.36)	(617.20)
803,455	3,632.12	3,223.76	(11.24)	3,568.67	63.45	(344.91)
1,032,507	663.74	589.12	(11.24)	1,252.92	(589.18)	(663.80)
1,008,807	1,016.21	901.98	(11.24)	1,697.56	(681.34)	(795.58)
1,039,323	1,899.81	1,686.25	(11.24)	1,982.82	(83.02)	(296.57)
1,226,527	585.99	520.14	(11.24)	1,267.56	(681.57)	(747.42)
201,835	4,922.15	4,369.14	(11.24)	4,897.68	24.47	(528.54)
15,340	3,983.84	3,536.37	(11.23)	3,826.99	156.85	(290.62)
113,845	1,078.35	957.32	(11.22)	1,638.39	(560.04)	(681.07)
865,532	2,136.97	1,897.14	(11.22)	2,260.43	(123.45)	(363.29)
1,153,960	1,776.82	1,577.40	(11.22)	1,759.50	17.32	(182.10)
17,793	1,066.25	946.58	(11.22)	1,920.08	(853.84)	(973.50)
226,023	4,936.09	4,382.75	(11.21)	5,245.03	(308.95)	(862.29)
882,761	2,348.48	2,085.34	(11.20)	2,297.41	51.08	(212.06)
954,294	2,407.67	2,138.03	(11.20)	2,543.23	(135.56)	(405.20)
147,437	2,477.12	2,199.86	(11.19)	2,364.61	112.50	(164.75)
439,312	3,152.81	2,800.03	(11.19)	3,397.07	(244.26)	(597.03)
450,700	2,900.42	2,575.91	(11.19)	3,080.19	(179.76)	(504.28)
1,182,327	1,005.53	893.03	(11.19)	1,454.53	(448.99)	(561.50)
1,205,239	2,629.66	2,335.46	(11.19)	3,317.44	(687.78)	(981.99)
459,055	2,829.14	2,512.64	(11.19)	2,832.07	(2.93)	(319.43)
1,259,965	897.18	796.82	(11.19)	863.40	33.78	(66.57)
464,938	2,235.38	1,985.35	(11.19)	2,199.81	35.57	(214.46)
333,775	2,818.77	2,503.55	(11.18)	2,927.21	(108.44)	(423.66)
353,652	2,657.19	2,360.10	(11.18)	2,661.87	(4.68)	(301.76)
354,097	3,431.41	3,047.81	(11.18)	3,904.62	(473.21)	(856.81)
139,563	927.25	823.62	(11.18)	1,663.38	(736.13)	(839.76)
1,019,490	1,762.86	1,565.87	(11.17)	2,137.69	(374.82)	(571.82)
494,740	4,699.14	4,174.11	(11.17)	4,617.17	81.97	(443.06)
1,408,671	6,332.96	5,625.74	(11.17)	6,288.50	44.46	(662.76)
351,044	1,854.52	1,647.47	(11.16)	2,017.68	(163.17)	(370.21)
463,402	2,462.20	2,187.32	(11.16)	2,410.63	51.57	(223.31)
962,875	2,014.76	1,789.92	(11.16)	1,970.62	44.15	(180.70)
1,005,149	1,758.69	1,562.46	(11.16)	1,818.46	(59.77)	(256.00)
146,771	3,849.57	3,420.06	(11.16)	4,016.04	(166.47)	(595.98)
349,434	3,451.69	3,066.85	(11.15)	3,387.56	64.13	(320.71)
553,017	2,613.69	2,322.39	(11.15)	2,764.82	(151.13)	(442.43)
255,681	2,655.61	2,359.68	(11.14)	2,923.54	(267.94)	(563.86)
238,619	2,399.03	2,131.71	(11.14)	2,501.70	(102.67)	(369.99)
1,225,649	2,703.56	2,402.32	(11.14)	2,947.89	(244.33)	(545.57)
930,930	3,112.17	2,765.42	(11.14)	3,402.50	(290.34)	(637.08)
978,461	2,920.60	2,595.23	(11.14)	2,785.04	135.56	(189.81)
745,800	887.95	789.04	(11.14)	999.39	(111.44)	(210.36)
863,868	2,290.20	2,035.10	(11.14)	2,310.75	(20.55)	(275.65)
1,091,157	2,272.74	2,019.62	(11.14)	2,463.86	(191.12)	(444.24)
622,416	1,063.87	945.39	(11.14)	1,205.77	(141.89)	(260.38)
862,926	2,554.55	2,270.06	(11.14)	3,133.21	(578.66)	(863.15)
704,478	4,095.00	3,638.98	(11.14)	4,515.86	(420.87)	(876.88)
656,093	2,353.41	2,091.35	(11.14)	2,817.74	(464.33)	(726.39)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
1,092,166	5,294.82	4,705.26	(11.13)	5,156.27	138.55	(451.01)
1,169,794	3,339.88	2,968.09	(11.13)	3,348.42	(8.54)	(380.33)
464,005	2,591.13	2,302.69	(11.13)	2,622.11	(30.99)	(319.42)
857,096	3,356.78	2,983.18	(11.13)	3,639.11	(282.33)	(655.93)
1,172,559	6,096.21	5,417.73	(11.13)	5,811.20	285.01	(393.47)
1,061,453	2,862.94	2,544.31	(11.13)	3,090.79	(227.86)	(546.48)
672,771	934.77	830.74	(11.13)	1,405.54	(470.77)	(574.80)
959,413	1,815.87	1,613.82	(11.13)	1,764.71	51.16	(150.89)
424,147	634.94	564.30	(11.13)	1,344.79	(709.85)	(780.49)
905,960	3,509.61	3,119.16	(11.13)	3,449.20	60.41	(330.04)
771,022	2,505.58	2,226.88	(11.12)	2,366.38	139.20	(139.50)
63,665	3,027.31	2,690.62	(11.12)	2,962.94	64.37	(272.31)
17,737	3,706.93	3,294.71	(11.12)	4,069.43	(362.51)	(774.72)
1,041,877	2,344.45	2,083.76	(11.12)	2,546.39	(201.93)	(462.63)
400,970	2,066.29	1,836.62	(11.12)	2,196.19	(129.90)	(359.58)
66,716	4,311.27	3,832.11	(11.11)	4,236.49	74.77	(404.38)
737,848	3,395.13	3,017.81	(11.11)	3,930.39	(535.26)	(912.58)
1,186,363	1,058.14	940.56	(11.11)	1,432.93	(374.79)	(492.37)
289,146	2,156.48	1,916.88	(11.11)	2,117.93	38.55	(201.05)
1,172,095	3,138.42	2,789.77	(11.11)	3,199.84	(61.42)	(410.07)
1,070,341	2,107.96	1,873.85	(11.11)	1,994.72	113.24	(120.87)
1,150,100	2,876.39	2,557.01	(11.10)	2,977.08	(100.69)	(420.07)
453,525	2,579.52	2,293.11	(11.10)	2,499.53	79.99	(206.42)
494,953	3,313.14	2,945.27	(11.10)	3,549.63	(236.49)	(604.36)
19,200	3,274.46	2,910.95	(11.10)	3,360.47	(86.01)	(449.52)
297,653	1,972.33	1,753.42	(11.10)	2,298.28	(325.95)	(544.86)
238,742	4,206.56	3,739.74	(11.10)	4,140.06	66.51	(400.31)
1,168,410	990.47	880.70	(11.08)	1,112.78	(122.30)	(232.08)
1,167,607	4,253.41	3,782.04	(11.08)	4,548.84	(295.43)	(766.79)
169,008	2,632.33	2,340.68	(11.08)	2,930.79	(298.46)	(590.11)
112,709	1,818.79	1,617.29	(11.08)	1,828.53	(9.75)	(211.25)
870,112	2,665.42	2,370.17	(11.08)	2,897.40	(231.98)	(527.22)
74,798	1,032.66	918.28	(11.08)	1,665.92	(633.26)	(747.64)
375,721	950.48	845.23	(11.07)	1,350.58	(400.11)	(505.36)
148,373	3,081.82	2,740.66	(11.07)	3,396.52	(314.70)	(655.85)
1,279,044	678.73	603.67	(11.06)	1,276.77	(598.04)	(673.10)
442,041	885.23	787.34	(11.06)	1,215.81	(330.58)	(428.47)
885,196	2,765.55	2,459.75	(11.06)	2,655.52	110.04	(195.76)
1,065,445	759.68	675.72	(11.05)	1,057.41	(297.73)	(381.69)
25,365	3,632.73	3,231.31	(11.05)	4,445.48	(812.75)	(1,214.17)
21,473	817.45	727.16	(11.05)	949.98	(132.53)	(222.82)
55,082	3,009.61	2,677.23	(11.04)	2,985.00	24.62	(307.77)
896,424	4,903.60	4,362.10	(11.04)	5,361.87	(458.26)	(999.77)
343,988	3,723.15	3,312.05	(11.04)	4,255.82	(532.67)	(943.77)
471,723	2,772.43	2,466.32	(11.04)	3,054.78	(282.35)	(588.46)
977,110	2,458.65	2,187.24	(11.04)	2,551.92	(93.27)	(364.69)
804,265	4,355.70	3,874.95	(11.04)	4,156.76	198.94	(281.81)
448,357	2,433.29	2,164.75	(11.04)	2,533.02	(99.73)	(368.27)
1,124,916	3,342.71	2,973.85	(11.03)	3,529.22	(186.51)	(555.38)



**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
1,278,023	2,747.99	2,444.75	(11.03)	2,624.04	123.94	(179.29)
1,175,771	999.40	889.12	(11.03)	1,337.53	(338.13)	(448.41)
636,094	1,471.95	1,309.54	(11.03)	1,502.89	(30.94)	(193.35)
203,472	2,273.84	2,023.04	(11.03)	2,177.65	96.19	(154.61)
1,392,213	818.31	728.06	(11.03)	1,001.44	(183.13)	(273.38)
998,478	2,344.88	2,086.39	(11.02)	2,377.84	(32.97)	(291.45)
551,158	1,961.70	1,745.47	(11.02)	2,047.74	(86.04)	(302.28)
1,203,652	1,005.41	894.63	(11.02)	1,383.29	(377.87)	(488.66)
1,386,191	1,043.78	928.78	(11.02)	1,063.73	(19.94)	(134.95)
993,935	2,841.05	2,528.03	(11.02)	2,948.31	(107.26)	(420.28)
699,223	3,412.76	3,036.76	(11.02)	3,372.90	39.86	(336.14)
626,042	3,399.18	3,024.76	(11.02)	3,445.15	(45.97)	(420.39)
80,696	3,570.84	3,177.71	(11.01)	3,554.48	16.36	(376.77)
568,021	874.03	777.81	(11.01)	1,550.54	(676.52)	(772.73)
182,308	1,894.66	1,686.10	(11.01)	1,923.00	(28.34)	(236.91)
850,774	3,072.68	2,734.62	(11.00)	3,297.16	(224.48)	(562.54)
92,780	2,572.75	2,289.80	(11.00)	2,613.27	(40.51)	(323.47)
559,361	3,564.80	3,172.76	(11.00)	3,881.41	(316.61)	(708.65)
176,524	1,691.71	1,505.66	(11.00)	1,625.50	66.20	(119.84)
441,752	1,950.42	1,735.99	(10.99)	2,018.37	(67.95)	(282.37)
1,161,007	1,909.63	1,699.75	(10.99)	1,907.84	1.78	(208.10)
326,592	1,745.92	1,554.04	(10.99)	1,886.82	(140.89)	(332.78)
327,773	3,948.80	3,514.96	(10.99)	3,887.33	61.47	(372.37)
590,307	1,042.47	927.96	(10.98)	1,797.54	(755.07)	(869.58)
587,826	2,422.04	2,156.05	(10.98)	2,672.80	(250.76)	(516.75)
372,148	973.52	866.66	(10.98)	1,503.85	(530.33)	(637.19)
735,586	1,067.40	950.23	(10.98)	1,335.21	(267.80)	(384.97)
979,731	749.43	667.18	(10.98)	956.54	(207.11)	(289.36)
1,257,941	2,482.56	2,210.17	(10.97)	2,504.73	(22.17)	(294.57)
18,263	468.43	417.03	(10.97)	499.31	(30.88)	(82.28)
1,203,906	942.54	839.13	(10.97)	1,349.42	(406.88)	(510.28)
352,014	4,056.09	3,611.12	(10.97)	4,078.26	(22.16)	(467.14)
579,049	898.36	799.84	(10.97)	1,478.22	(579.86)	(678.37)
720,795	1,897.89	1,689.82	(10.96)	1,956.71	(58.82)	(266.89)
1,248,441	4,232.32	3,768.33	(10.96)	4,465.11	(232.79)	(696.79)
97,076	2,328.42	2,073.22	(10.96)	2,332.78	(4.37)	(259.57)
312,849	3,418.33	3,043.69	(10.96)	3,522.42	(104.08)	(478.73)
806,733	2,133.24	1,899.52	(10.96)	2,242.72	(109.49)	(343.21)
404,032	4,418.13	3,934.12	(10.96)	4,558.10	(139.97)	(623.98)
1,030,427	2,641.88	2,352.46	(10.95)	3,226.04	(584.17)	(873.58)
153,406	734.93	654.53	(10.94)	1,431.86	(696.93)	(777.34)
1,177,769	984.70	876.97	(10.94)	1,406.13	(421.43)	(529.16)
360,033	1,034.62	921.46	(10.94)	1,430.13	(395.51)	(508.68)
208,382	2,571.72	2,290.44	(10.94)	2,892.95	(321.23)	(602.51)
1,299,827	2,782.48	2,478.16	(10.94)	2,656.07	126.41	(177.90)
1,016,630	2,363.26	2,104.79	(10.94)	2,285.80	77.46	(181.01)
776,873	4,659.45	4,149.89	(10.94)	4,707.15	(47.70)	(557.26)
562,459	2,865.81	2,552.42	(10.94)	2,825.56	40.25	(273.14)
558,568	3,695.62	3,291.63	(10.93)	3,917.57	(221.95)	(625.94)



**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
102,464	2,970.88	2,646.15	(10.93)	3,211.33	(240.45)	(565.18)
726,828	3,768.72	3,356.80	(10.93)	3,734.33	34.39	(377.54)
781,100	978.53	871.61	(10.93)	1,212.19	(233.66)	(340.58)
557,143	4,914.42	4,377.54	(10.92)	5,444.06	(529.64)	(1,066.53)
795,000	1,037.31	924.02	(10.92)	1,406.74	(369.43)	(482.72)
1,101,467	3,068.22	2,733.16	(10.92)	3,736.20	(667.99)	(1,003.05)
833,240	3,618.13	3,223.04	(10.92)	3,795.77	(177.64)	(572.74)
825,648	912.73	813.07	(10.92)	1,518.01	(605.28)	(704.94)
1,044,873	807.20	719.11	(10.91)	1,107.93	(300.73)	(388.82)
193,791	2,774.63	2,471.86	(10.91)	2,766.56	8.07	(294.70)
589,771	2,046.85	1,823.50	(10.91)	2,161.47	(114.62)	(337.98)
1,091,777	1,726.27	1,537.94	(10.91)	1,818.16	(91.89)	(280.23)
958,956	2,258.47	2,012.17	(10.91)	2,151.36	107.11	(139.20)
66,898	5,660.05	5,042.82	(10.90)	6,189.07	(529.02)	(1,146.24)
1,387,291	3,367.16	3,000.02	(10.90)	3,322.31	44.85	(322.29)
337,409	2,388.93	2,128.46	(10.90)	2,614.38	(225.45)	(485.92)
1,232,180	3,447.15	3,071.31	(10.90)	3,604.74	(157.59)	(533.43)
513,651	2,800.60	2,495.33	(10.90)	2,742.84	57.75	(247.52)
1,221,310	437.46	389.82	(10.89)	445.81	(8.35)	(55.99)
431,134	1,058.30	943.03	(10.89)	1,324.83	(266.54)	(381.80)
839,537	1,064.43	948.54	(10.89)	1,866.97	(802.55)	(918.44)
545,566	2,929.81	2,610.84	(10.89)	2,927.52	2.28	(316.68)
1,174,139	3,194.85	2,847.06	(10.89)	3,523.22	(328.37)	(676.16)
1,186,321	4,953.47	4,414.30	(10.88)	4,953.71	(0.24)	(539.41)
889,772	2,601.97	2,318.80	(10.88)	2,740.98	(139.01)	(422.18)
304,225	3,244.63	2,891.52	(10.88)	4,156.80	(912.17)	(1,265.28)
1,401,660	4,909.34	4,375.10	(10.88)	5,148.90	(239.56)	(773.81)
666,104	2,109.36	1,879.87	(10.88)	2,046.64	62.72	(166.76)
573,275	3,925.68	3,498.61	(10.88)	4,445.36	(519.68)	(946.75)
176,297	981.29	874.54	(10.88)	1,680.30	(699.01)	(805.76)
768,763	2,695.78	2,402.52	(10.88)	2,737.49	(41.71)	(334.97)
1,192,445	721.16	642.72	(10.88)	915.54	(194.38)	(272.82)
92,710	2,545.04	2,268.24	(10.88)	2,938.05	(393.01)	(669.81)
915,824	2,505.27	2,232.83	(10.87)	2,540.53	(35.27)	(307.70)
745,711	581.38	518.16	(10.87)	946.34	(364.97)	(428.18)
513,046	2,665.73	2,375.92	(10.87)	2,662.42	3.31	(286.50)
487,213	1,037.85	925.05	(10.87)	1,640.66	(602.80)	(715.61)
399,038	3,628.89	3,234.59	(10.87)	3,719.77	(90.89)	(485.18)
316,528	2,256.68	2,011.59	(10.86)	2,167.01	89.67	(155.42)
1,409,603	3,182.62	2,837.10	(10.86)	3,366.96	(184.35)	(529.86)
135,835	823.95	734.51	(10.85)	1,416.88	(592.94)	(682.37)
535,591	1,003.01	894.16	(10.85)	1,409.93	(406.92)	(515.77)
180,824	3,505.95	3,125.66	(10.85)	3,451.38	54.56	(325.72)
325,913	3,384.15	3,017.16	(10.84)	3,488.84	(104.69)	(471.68)
703,341	2,534.80	2,259.94	(10.84)	2,532.11	2.69	(272.17)
607,115	4,449.88	3,967.44	(10.84)	4,910.43	(460.55)	(942.99)
725,934	5,324.51	4,747.64	(10.83)	5,232.55	91.96	(484.91)
221,674	1,019.83	909.38	(10.83)	1,600.67	(580.84)	(691.29)
1,152,391	701.29	625.35	(10.83)	1,377.55	(676.25)	(752.20)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
395,973	633.03	564.48	(10.83)	1,009.95	(376.92)	(445.47)
548,016	2,631.33	2,346.39	(10.83)	2,687.11	(55.79)	(340.72)
1,407,448	963.65	859.31	(10.83)	1,472.42	(508.76)	(613.11)
1,369,469	2,136.76	1,905.40	(10.83)	2,041.01	95.75	(135.61)
614,858	3,294.72	2,938.03	(10.83)	3,341.04	(46.32)	(403.00)
333,900	4,613.98	4,114.63	(10.82)	4,494.40	119.59	(379.77)
18,039	1,752.62	1,562.98	(10.82)	1,683.92	68.70	(120.94)
1,401,659	4,547.00	4,055.04	(10.82)	4,658.65	(111.66)	(603.62)
882,656	1,024.40	913.56	(10.82)	1,708.84	(684.44)	(795.27)
711,072	3,382.54	3,016.72	(10.81)	3,778.32	(395.78)	(761.59)
152,492	2,146.70	1,914.56	(10.81)	2,508.23	(361.53)	(593.68)
598,078	3,603.69	3,213.99	(10.81)	3,832.38	(228.69)	(618.39)
277,110	4,048.79	3,611.07	(10.81)	4,046.01	2.78	(434.94)
491,710	1,019.61	909.39	(10.81)	1,122.80	(103.18)	(213.40)
517,747	2,689.21	2,398.58	(10.81)	2,753.10	(63.89)	(354.52)
1,296,908	2,841.96	2,534.84	(10.81)	2,720.16	121.81	(185.32)
972,503	3,575.31	3,188.96	(10.81)	3,650.18	(74.87)	(461.22)
1,011,013	1,020.07	909.85	(10.81)	1,348.61	(328.54)	(438.77)
582,216	3,831.00	3,417.10	(10.80)	4,082.32	(251.32)	(665.21)
1,040,824	949.38	846.93	(10.79)	1,419.18	(469.80)	(572.25)
117,255	809.31	721.98	(10.79)	1,372.77	(563.46)	(650.79)
772,268	2,462.71	2,197.03	(10.79)	2,644.65	(181.95)	(447.62)
1,358,431	7,381.90	6,585.66	(10.79)	7,774.60	(392.71)	(1,188.94)
1,111,038	2,490.09	2,221.51	(10.79)	2,505.78	(15.69)	(284.27)
598,767	2,983.97	2,662.16	(10.78)	3,674.87	(690.90)	(1,012.71)
210,867	2,969.14	2,648.96	(10.78)	3,028.31	(59.16)	(379.35)
76,861	799.49	713.28	(10.78)	1,424.29	(624.81)	(711.01)
1,406,174	5,060.68	4,515.03	(10.78)	5,037.47	23.22	(522.44)
996,276	916.66	817.83	(10.78)	1,972.62	(1,055.97)	(1,154.80)
1,119,097	1,639.29	1,462.63	(10.78)	1,807.36	(168.07)	(344.73)
449,139	2,196.64	1,959.93	(10.78)	2,382.18	(185.54)	(422.25)
566,628	3,827.95	3,415.54	(10.77)	4,408.18	(580.23)	(992.63)
1,098,856	2,735.70	2,441.06	(10.77)	2,976.32	(240.62)	(535.26)
1,291,123	951.44	848.99	(10.77)	1,362.29	(410.85)	(513.30)
13,534	1,024.12	913.89	(10.76)	1,685.44	(661.33)	(771.55)
1,007,220	1,045.69	933.17	(10.76)	1,760.86	(715.17)	(827.69)
640,111	2,856.68	2,549.28	(10.76)	2,850.00	6.68	(300.72)
362,541	3,896.52	3,477.24	(10.76)	3,861.17	35.36	(383.92)
404,881	1,073.48	958.00	(10.76)	1,593.89	(520.41)	(635.90)
546,776	3,585.26	3,199.61	(10.76)	4,128.31	(543.05)	(928.69)
323,655	4,716.76	4,209.42	(10.76)	4,597.10	119.67	(387.67)
1,164,869	3,316.87	2,960.11	(10.76)	3,825.73	(508.86)	(865.62)
1,106,126	2,524.93	2,253.36	(10.76)	2,446.37	78.56	(193.00)
502,531	3,309.80	2,953.85	(10.75)	3,499.82	(190.02)	(545.98)
734,556	979.42	874.10	(10.75)	1,496.29	(516.87)	(622.19)
1,095,878	1,876.13	1,674.38	(10.75)	2,469.64	(593.51)	(795.27)
1,394,679	4,000.67	3,570.48	(10.75)	3,969.92	30.75	(399.43)
1,054,232	642.98	573.85	(10.75)	1,746.14	(1,103.16)	(1,172.29)
398,344	2,737.90	2,443.55	(10.75)	2,741.92	(4.02)	(298.38)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
1,037,529	3,471.85	3,098.62	(10.75)	4,450.26	(978.41)	(1,351.64)
830,171	818.11	730.18	(10.75)	1,218.74	(400.62)	(488.55)
584,322	2,857.80	2,550.65	(10.75)	2,965.77	(107.96)	(415.11)
1,058,921	888.86	793.34	(10.75)	1,060.65	(171.79)	(267.31)
297,516	958.72	855.72	(10.74)	2,116.46	(1,157.74)	(1,260.74)
476,006	2,365.50	2,111.44	(10.74)	2,524.32	(158.82)	(412.88)
1,396,609	1,542.93	1,377.23	(10.74)	1,633.64	(90.71)	(256.41)
1,163,728	3,319.99	2,963.47	(10.74)	3,778.29	(458.30)	(814.82)
1,259,512	873.03	779.28	(10.74)	1,634.01	(760.98)	(854.73)
1,047,547	2,177.91	1,944.04	(10.74)	2,204.87	(26.96)	(260.83)
628,312	2,751.64	2,456.22	(10.74)	2,861.11	(109.47)	(404.89)
50,435	4,941.56	4,411.12	(10.73)	5,087.72	(146.17)	(676.60)
1,040,433	3,146.16	2,808.55	(10.73)	3,266.26	(120.10)	(457.71)
1,086,905	3,466.12	3,094.21	(10.73)	3,583.19	(117.07)	(488.98)
327,669	443.07	395.54	(10.73)	424.89	18.18	(29.35)
854,994	2,239.86	1,999.59	(10.73)	2,226.05	13.81	(226.45)
839,065	3,292.07	2,938.94	(10.73)	4,051.74	(759.67)	(1,112.79)
908,962	3,851.94	3,438.76	(10.73)	3,718.45	133.49	(279.68)
825,947	1,019.16	909.86	(10.72)	2,148.36	(1,129.20)	(1,238.49)
17,124	3,664.19	3,271.29	(10.72)	5,608.28	(1,944.08)	(2,336.99)
1,220,772	746.54	666.51	(10.72)	1,061.30	(314.76)	(394.80)
843,944	2,205.54	1,969.13	(10.72)	2,287.74	(82.20)	(318.61)
78,928	1,022.03	912.49	(10.72)	1,206.65	(184.62)	(294.16)
1,406,565	965.78	862.27	(10.72)	1,365.92	(400.14)	(503.65)
869,469	868.04	775.02	(10.72)	997.59	(129.55)	(222.57)
80,313	908.77	811.40	(10.71)	1,445.06	(536.30)	(633.66)
804,026	2,682.15	2,394.80	(10.71)	2,589.98	92.17	(195.18)
1,076,225	2,535.67	2,264.05	(10.71)	2,969.34	(433.67)	(705.29)
213,966	1,981.28	1,769.10	(10.71)	2,181.71	(200.42)	(412.60)
576,587	2,496.31	2,228.98	(10.71)	2,477.42	18.89	(248.44)
414,515	986.24	880.63	(10.71)	1,701.52	(715.28)	(820.89)
321,727	1,052.82	940.10	(10.71)	1,583.06	(530.24)	(642.96)
366,444	2,357.66	2,105.24	(10.71)	2,413.91	(56.25)	(308.66)
1,045,799	2,625.91	2,344.85	(10.70)	2,701.12	(75.21)	(356.28)
411,867	1,889.60	1,687.36	(10.70)	1,882.27	7.32	(194.91)
118,838	3,096.03	2,764.91	(10.70)	3,265.75	(169.72)	(500.84)
859,295	2,690.58	2,402.83	(10.69)	2,788.70	(98.12)	(385.86)
839,785	1,009.83	901.87	(10.69)	1,372.61	(362.78)	(470.74)
204,279	2,504.76	2,236.99	(10.69)	2,452.38	52.38	(215.39)
567,218	2,313.64	2,066.36	(10.69)	2,494.33	(180.69)	(427.97)
596,269	2,382.79	2,128.12	(10.69)	2,483.62	(100.83)	(355.50)
67,583	2,505.79	2,237.98	(10.69)	2,659.48	(153.69)	(421.50)
230,065	4,102.18	3,663.99	(10.68)	4,290.47	(188.29)	(626.48)
51,925	2,779.20	2,482.40	(10.68)	2,950.71	(171.51)	(468.32)
311,399	744.47	665.01	(10.67)	777.22	(32.75)	(112.22)
499,605	1,062.20	948.83	(10.67)	1,170.97	(108.77)	(222.14)
660,827	2,771.06	2,475.32	(10.67)	3,018.91	(247.85)	(543.59)
79,297	5,004.41	4,470.44	(10.67)	5,312.42	(308.01)	(841.98)
92,547	1,015.88	907.52	(10.67)	1,569.63	(553.75)	(662.11)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
1,290,607	730.45	652.57	(10.66)	823.79	(93.34)	(171.23)
677,060	3,786.78	3,383.06	(10.66)	3,728.75	58.03	(345.69)
595,291	3,361.44	3,003.08	(10.66)	3,297.55	63.89	(294.47)
940,008	1,704.34	1,522.66	(10.66)	1,625.23	79.12	(102.57)
393,132	3,921.26	3,503.34	(10.66)	3,735.74	185.52	(232.40)
681,036	4,281.30	3,825.06	(10.66)	4,356.28	(74.98)	(531.22)
737,595	10,731.16	9,587.72	(10.66)	10,913.25	(182.09)	(1,325.53)
408,786	3,613.37	3,228.36	(10.66)	3,739.84	(126.47)	(511.48)
129,207	773.14	690.77	(10.65)	831.69	(58.55)	(140.92)
696,885	2,331.38	2,083.08	(10.65)	2,371.06	(39.68)	(287.98)
864,456	3,042.77	2,718.72	(10.65)	3,418.47	(375.70)	(699.75)
1,227,992	2,169.93	1,938.88	(10.65)	2,384.51	(214.58)	(445.63)
449,249	3,517.31	3,142.82	(10.65)	3,651.19	(133.87)	(508.36)
281,999	2,860.66	2,556.12	(10.65)	2,852.95	7.72	(296.83)
392,189	2,335.12	2,086.56	(10.64)	2,318.02	17.10	(231.46)
646,427	3,555.26	3,176.82	(10.64)	3,764.66	(209.40)	(587.84)
433,410	4,747.66	4,242.51	(10.64)	5,079.82	(332.17)	(837.31)
907,764	2,949.80	2,636.05	(10.64)	2,899.90	49.90	(263.85)
693,338	1,679.30	1,500.71	(10.63)	1,658.26	21.04	(157.55)
819,146	3,623.63	3,238.40	(10.63)	3,798.75	(175.12)	(560.35)
206,026	3,345.42	2,989.80	(10.63)	3,578.18	(232.76)	(588.38)
1,237,152	3,968.09	3,546.33	(10.63)	4,935.43	(967.34)	(1,389.10)
1,406,793	2,197.46	1,963.90	(10.63)	2,280.09	(82.63)	(316.19)
577,146	1,676.72	1,498.56	(10.63)	2,258.23	(581.51)	(759.67)
684,852	2,872.27	2,567.12	(10.62)	2,984.74	(112.47)	(417.63)
192,221	3,274.28	2,926.42	(10.62)	3,194.58	79.70	(268.15)
916,226	2,051.37	1,833.44	(10.62)	2,246.81	(195.44)	(413.37)
1,273,085	3,305.16	2,954.04	(10.62)	3,605.38	(300.22)	(651.35)
894,454	3,320.15	2,967.46	(10.62)	3,986.81	(666.66)	(1,019.35)
866,401	868.23	776.01	(10.62)	1,086.07	(217.85)	(310.06)
663,676	2,533.60	2,264.54	(10.62)	2,947.15	(413.56)	(682.61)
1,147,059	494.46	441.95	(10.62)	469.34	25.12	(27.39)
931,240	863.19	771.53	(10.62)	1,446.84	(583.65)	(675.31)
763,581	2,520.58	2,253.08	(10.61)	2,428.84	91.74	(175.76)
977,979	926.61	828.28	(10.61)	1,573.60	(646.99)	(745.32)
2,559	3,077.40	2,750.87	(10.61)	3,459.29	(381.89)	(708.42)
859,688	875.87	782.95	(10.61)	1,470.52	(594.65)	(687.57)
1,073,298	795.94	711.51	(10.61)	1,168.08	(372.14)	(456.57)
364,855	2,787.06	2,491.44	(10.61)	2,947.55	(160.49)	(456.11)
714,225	3,444.53	3,079.29	(10.60)	3,694.60	(250.08)	(615.31)
904,412	994.15	888.74	(10.60)	1,482.94	(488.79)	(594.20)
1,160,461	3,525.88	3,152.24	(10.60)	3,472.87	53.01	(320.63)
387,316	3,810.20	3,406.49	(10.60)	3,611.36	198.84	(204.88)
812,003	3,157.53	2,823.01	(10.59)	3,363.75	(206.22)	(540.74)
153,008	6,328.27	5,657.96	(10.59)	6,022.38	305.89	(364.43)
1,300,657	2,901.12	2,593.84	(10.59)	3,097.34	(196.21)	(503.50)
450,050	1,730.28	1,547.02	(10.59)	1,742.07	(11.79)	(195.05)
1,036,271	1,802.78	1,611.89	(10.59)	1,785.49	17.29	(173.60)
115,155	2,434.78	2,177.05	(10.59)	2,407.71	27.07	(230.65)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
1,274,076	627.83	561.37	(10.59)	868.82	(240.99)	(307.45)
278,880	3,459.95	3,093.76	(10.58)	3,289.11	170.83	(195.35)
485,148	4,285.13	3,831.63	(10.58)	4,717.84	(432.71)	(886.21)
1,163,103	10,941.25	9,783.33	(10.58)	10,700.04	241.21	(916.71)
1,249,489	3,981.10	3,559.93	(10.58)	4,154.15	(173.05)	(594.23)
738,594	3,081.34	2,755.36	(10.58)	3,101.27	(19.93)	(345.91)
604,732	3,698.34	3,307.10	(10.58)	4,219.37	(521.03)	(912.26)
276,421	3,269.95	2,924.06	(10.58)	3,594.33	(324.38)	(670.27)
1,400,708	6,955.65	6,219.90	(10.58)	7,254.94	(299.29)	(1,035.04)
998,493	1,024.69	916.30	(10.58)	1,057.02	(32.33)	(140.72)
690,711	1,066.37	953.57	(10.58)	1,460.72	(394.35)	(507.14)
742,699	3,436.64	3,073.23	(10.57)	3,407.48	29.16	(334.25)
506,613	4,678.88	4,184.11	(10.57)	4,474.31	204.57	(290.20)
204,070	3,282.17	2,935.11	(10.57)	3,432.58	(150.41)	(497.47)
110,614	2,251.32	2,013.27	(10.57)	2,449.24	(197.92)	(435.97)
617,890	1,035.58	926.08	(10.57)	1,070.14	(34.56)	(144.06)
471,893	675.87	604.42	(10.57)	1,174.42	(498.56)	(570.00)
1,101,962	3,863.03	3,454.68	(10.57)	3,877.09	(14.06)	(422.41)
750,084	2,681.09	2,397.71	(10.57)	3,093.77	(412.68)	(696.06)
534,759	926.08	828.20	(10.57)	1,632.26	(706.18)	(804.05)
368,321	3,484.81	3,116.57	(10.57)	3,737.15	(252.34)	(620.57)
1,085,190	2,784.82	2,490.58	(10.57)	3,132.27	(347.45)	(641.69)
12,585	3,182.06	2,846.05	(10.56)	3,251.49	(69.42)	(405.44)
1,142,860	3,970.57	3,551.34	(10.56)	4,145.28	(174.71)	(593.93)
1,011,579	890.58	796.55	(10.56)	1,543.16	(652.58)	(746.61)
657,965	3,338.11	2,985.69	(10.56)	3,251.48	86.64	(265.79)
221,995	2,955.89	2,643.85	(10.56)	2,829.06	126.82	(185.21)
1,372,113	4,108.05	3,674.40	(10.56)	3,940.87	167.18	(266.47)
742,868	2,224.82	1,989.98	(10.56)	2,163.80	61.03	(173.82)
292,140	2,503.79	2,239.55	(10.55)	2,554.67	(50.88)	(315.12)
492,780	1,937.77	1,733.27	(10.55)	2,065.33	(127.56)	(332.06)
1,094,136	2,691.10	2,407.18	(10.55)	2,691.33	(0.23)	(284.15)
940,522	2,219.93	1,985.79	(10.55)	2,133.10	86.83	(147.31)
854,828	923.85	826.43	(10.55)	1,368.94	(445.09)	(542.51)
440,844	2,955.81	2,644.12	(10.54)	3,068.00	(112.19)	(423.88)
1,082,692	5,124.29	4,583.97	(10.54)	5,204.60	(80.32)	(620.63)
938,025	1,030.92	922.23	(10.54)	1,493.98	(463.06)	(571.75)
320,311	2,854.29	2,553.43	(10.54)	2,934.32	(80.04)	(380.89)
772,359	3,034.93	2,715.03	(10.54)	3,459.83	(424.90)	(744.80)
1,403,431	1,056.71	945.34	(10.54)	1,411.57	(354.86)	(466.23)
1,297,697	1,722.73	1,541.21	(10.54)	1,824.24	(101.51)	(283.03)
943,526	5,643.27	5,048.75	(10.54)	6,293.78	(650.51)	(1,245.03)
362,622	2,549.46	2,280.88	(10.53)	2,649.18	(99.73)	(368.30)
502,036	3,253.28	2,910.62	(10.53)	3,361.27	(107.98)	(450.65)
43,777	4,732.74	4,234.25	(10.53)	5,034.29	(301.55)	(800.04)
197,786	982.10	878.66	(10.53)	1,601.29	(619.19)	(722.63)
754,989	3,511.74	3,141.89	(10.53)	3,502.54	9.19	(360.65)
1,394,692	3,015.77	2,698.19	(10.53)	3,086.38	(70.62)	(388.20)
188,805	785.48	702.77	(10.53)	1,230.67	(445.19)	(527.90)



**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
1,249,404	2,742.98	2,454.18	(10.53)	2,698.55	44.44	(244.37)
490,953	4,273.53	3,823.60	(10.53)	4,480.44	(206.91)	(656.85)
426,749	2,466.24	2,206.59	(10.53)	2,359.00	107.24	(152.40)
1,257,658	1,006.60	900.63	(10.53)	2,010.95	(1,004.35)	(1,110.32)
959,751	2,045.36	1,830.05	(10.53)	1,992.43	52.93	(162.37)
636,090	5,429.79	4,858.39	(10.52)	6,014.13	(584.34)	(1,155.75)
718,090	2,829.37	2,531.63	(10.52)	3,074.77	(245.40)	(543.14)
672,513	2,262.94	2,024.81	(10.52)	2,334.11	(71.18)	(309.30)
1,358,440	4,537.50	4,060.08	(10.52)	4,784.73	(247.24)	(724.66)
89,266	786.04	703.35	(10.52)	1,044.56	(258.52)	(341.21)
1,166,533	2,143.94	1,918.39	(10.52)	2,236.45	(92.51)	(318.06)
715,040	1,987.74	1,778.63	(10.52)	2,043.60	(55.86)	(264.97)
848,427	754.54	675.16	(10.52)	898.71	(144.17)	(223.55)
571,077	988.52	884.54	(10.52)	1,741.90	(753.38)	(857.36)
196,490	2,010.94	1,799.45	(10.52)	1,984.08	26.86	(184.63)
1,405,299	1,040.44	931.03	(10.52)	1,604.07	(563.62)	(673.04)
501,828	2,383.65	2,133.04	(10.51)	2,370.47	13.19	(237.42)
668,715	830.38	743.10	(10.51)	1,374.73	(544.35)	(631.63)
937,389	543.23	486.13	(10.51)	778.07	(234.85)	(291.94)
695,332	3,092.84	2,767.78	(10.51)	3,267.35	(174.51)	(499.58)
1,384,565	1,750.55	1,566.58	(10.51)	1,668.31	82.24	(101.74)
365,048	2,979.92	2,666.75	(10.51)	3,063.64	(83.72)	(396.89)
272,321	3,093.89	2,768.80	(10.51)	3,072.14	21.75	(303.34)
15,811	965.05	863.68	(10.50)	1,289.85	(324.80)	(426.17)
154,326	1,746.82	1,563.36	(10.50)	2,093.16	(346.34)	(529.80)
622,674	1,032.89	924.45	(10.50)	1,233.36	(200.47)	(308.91)
1,059,869	2,515.75	2,251.70	(10.50)	2,896.76	(381.01)	(645.06)
815,033	2,291.10	2,050.64	(10.50)	2,261.24	29.87	(210.60)
208,533	2,643.24	2,365.93	(10.49)	2,624.64	18.60	(258.71)
1,185,828	1,812.11	1,622.01	(10.49)	2,064.48	(252.37)	(442.47)
67,825	2,578.84	2,308.36	(10.49)	2,570.17	8.67	(261.81)
1,019,668	1,802.94	1,613.87	(10.49)	2,188.56	(385.63)	(574.69)
470,241	4,041.93	3,618.10	(10.49)	3,832.47	209.46	(214.37)
1,057,423	868.79	777.72	(10.48)	1,884.94	(1,016.15)	(1,107.22)
1,214,429	3,171.68	2,839.24	(10.48)	3,438.21	(266.52)	(598.97)
1,060,663	2,897.59	2,593.98	(10.48)	3,307.98	(410.39)	(714.00)
131,185	4,138.32	3,704.85	(10.47)	4,478.67	(340.35)	(773.82)
446,397	3,087.83	2,764.47	(10.47)	3,057.80	30.03	(293.33)
1,415,644	5,149.59	4,610.35	(10.47)	5,524.04	(374.46)	(913.70)
513,944	2,075.35	1,858.11	(10.47)	2,305.09	(229.74)	(446.98)
701,111	2,550.72	2,283.76	(10.47)	2,448.10	102.62	(164.34)
308,073	2,896.48	2,593.40	(10.46)	2,937.49	(41.00)	(344.09)
544,127	2,314.43	2,072.38	(10.46)	2,630.81	(316.38)	(558.43)
484,694	1,067.84	956.16	(10.46)	1,526.06	(458.22)	(569.90)
1,161,892	2,535.57	2,270.40	(10.46)	2,839.17	(303.61)	(568.77)
1,410,800	783.26	701.37	(10.46)	1,483.69	(700.42)	(782.31)
997,765	1,786.46	1,599.70	(10.45)	1,701.98	84.48	(102.28)
968,226	3,673.58	3,289.58	(10.45)	3,701.90	(28.32)	(412.32)
239,550	2,338.68	2,094.29	(10.45)	2,254.88	83.80	(160.59)



**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
814,996	2,254.30	2,018.74	(10.45)	2,583.60	(329.30)	(564.86)
586,668	3,445.06	3,085.09	(10.45)	3,810.35	(365.30)	(725.26)
130,669	2,864.40	2,565.12	(10.45)	3,278.87	(414.47)	(713.75)
545,297	903.18	808.83	(10.45)	1,646.78	(743.61)	(837.96)
1,228,236	3,619.43	3,241.34	(10.45)	3,501.56	117.87	(260.22)
86,772	3,764.92	3,371.66	(10.45)	4,238.64	(473.72)	(866.98)
114,273	3,676.18	3,292.37	(10.44)	4,052.19	(376.01)	(759.82)
521,140	2,980.99	2,669.78	(10.44)	3,036.78	(55.79)	(367.00)
380,852	3,701.39	3,315.09	(10.44)	3,545.24	156.16	(230.15)
211,317	1,549.64	1,387.93	(10.44)	1,705.79	(156.15)	(317.86)
84,260	2,272.89	2,035.71	(10.44)	2,438.60	(165.72)	(402.89)
282,917	2,990.42	2,678.48	(10.43)	3,351.99	(361.56)	(673.50)
280,714	2,280.00	2,042.22	(10.43)	2,218.00	62.00	(175.77)
695,380	2,821.80	2,527.54	(10.43)	2,784.40	37.40	(256.86)
113,116	4,058.86	3,635.73	(10.42)	5,131.18	(1,072.32)	(1,495.45)
665,236	2,530.60	2,266.79	(10.42)	2,533.16	(2.57)	(266.37)
1,098,245	735.98	659.28	(10.42)	1,567.35	(831.38)	(908.07)
1,306,623	986.73	883.93	(10.42)	1,712.75	(726.01)	(828.82)
435,556	2,471.47	2,214.08	(10.41)	2,484.25	(12.78)	(270.16)
354,434	2,558.35	2,291.91	(10.41)	2,585.46	(27.12)	(293.55)
332,481	913.73	818.57	(10.41)	1,630.48	(716.75)	(811.90)
277,755	2,294.51	2,055.58	(10.41)	2,319.28	(24.77)	(263.70)
439,231	3,076.53	2,756.21	(10.41)	3,212.22	(135.68)	(456.01)
608,453	2,511.65	2,250.19	(10.41)	2,739.16	(227.51)	(488.97)
448,664	2,600.99	2,330.23	(10.41)	2,641.58	(40.59)	(311.35)
644,790	4,246.39	3,804.41	(10.41)	4,212.79	33.60	(408.38)
733,382	3,454.08	3,094.57	(10.41)	3,647.15	(193.07)	(552.58)
1,024,038	2,719.22	2,436.19	(10.41)	2,664.28	54.93	(228.09)
879,797	5,683.76	5,092.27	(10.41)	5,734.39	(50.63)	(642.12)
333,617	990.24	887.20	(10.41)	1,298.39	(308.15)	(411.19)
443,964	2,331.24	2,088.71	(10.40)	2,876.79	(545.54)	(788.08)
866,466	3,517.34	3,151.43	(10.40)	3,751.66	(234.32)	(600.23)
1,296,214	858.09	768.82	(10.40)	1,402.33	(544.25)	(633.51)
875,720	2,932.78	2,627.74	(10.40)	3,299.32	(366.54)	(671.59)
13,753	2,078.94	1,862.71	(10.40)	2,280.79	(201.86)	(418.09)
63,471	915.74	820.50	(10.40)	1,078.92	(163.17)	(258.41)
1,310,290	2,553.23	2,287.72	(10.40)	2,670.31	(117.08)	(382.59)
556,938	4,363.10	3,909.48	(10.40)	4,211.86	151.24	(302.39)
784,110	584.94	524.12	(10.40)	623.51	(38.58)	(99.39)
438,662	3,150.35	2,822.83	(10.40)	3,502.52	(352.17)	(679.69)
1,406,634	4,146.75	3,715.66	(10.40)	4,180.30	(33.55)	(464.64)
753,088	2,656.48	2,380.37	(10.39)	2,747.77	(91.29)	(367.40)
626,772	3,012.96	2,699.80	(10.39)	3,093.38	(80.42)	(393.58)
738,663	3,017.57	2,703.99	(10.39)	2,956.71	60.85	(252.72)
405,316	1,049.22	940.21	(10.39)	1,672.51	(623.29)	(732.30)
30,518	1,028.03	921.23	(10.39)	1,787.02	(758.99)	(865.79)
585,656	2,679.36	2,401.03	(10.39)	2,635.10	44.26	(234.08)
712,522	2,711.47	2,429.85	(10.39)	2,752.56	(41.09)	(322.71)
542,412	2,639.82	2,365.72	(10.38)	2,999.68	(359.86)	(633.96)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
77,207	5,293.83	4,744.17	(10.38)	5,334.10	(40.27)	(589.93)
323,395	991.82	888.85	(10.38)	1,207.16	(215.35)	(318.32)
977,037	3,322.08	2,977.27	(10.38)	3,639.96	(317.88)	(662.69)
1,137,980	932.45	835.74	(10.37)	1,327.79	(395.34)	(492.06)
108,219	3,586.53	3,214.53	(10.37)	3,760.85	(174.33)	(546.32)
147,727	976.72	875.42	(10.37)	1,000.36	(23.65)	(124.94)
1,261,716	3,331.22	2,985.75	(10.37)	3,421.48	(90.26)	(435.74)
166,589	1,049.05	940.26	(10.37)	1,968.67	(919.62)	(1,028.41)
162,487	2,888.48	2,588.95	(10.37)	3,200.98	(312.49)	(612.03)
503,613	1,066.04	955.52	(10.37)	1,271.95	(205.91)	(316.43)
1,117,387	981.58	879.83	(10.37)	1,560.36	(578.78)	(680.54)
896,713	3,534.49	3,168.37	(10.36)	3,580.81	(46.32)	(412.44)
328,792	1,019.38	913.79	(10.36)	1,176.54	(157.16)	(262.75)
711,009	1,004.14	900.14	(10.36)	1,539.78	(535.64)	(639.64)
1,147,404	2,149.11	1,926.52	(10.36)	2,602.85	(453.74)	(676.32)
95,591	949.70	851.34	(10.36)	1,171.18	(221.48)	(319.84)
1,034,367	2,424.45	2,173.39	(10.36)	2,413.47	10.98	(240.08)
579,086	3,355.51	3,008.09	(10.35)	3,863.41	(507.90)	(855.32)
349,433	1,673.61	1,500.34	(10.35)	1,726.43	(52.82)	(226.09)
94,277	2,335.68	2,094.03	(10.35)	2,323.32	12.36	(229.29)
1,128,401	3,625.65	3,250.59	(10.34)	3,679.56	(53.91)	(428.97)
1,093,984	3,283.21	2,943.61	(10.34)	3,818.75	(535.53)	(875.14)
1,352,532	8,646.92	7,752.66	(10.34)	8,326.70	320.23	(574.04)
588,214	3,442.79	3,086.89	(10.34)	3,533.82	(91.03)	(446.93)
1,119,049	3,759.30	3,370.86	(10.33)	3,909.11	(149.82)	(538.25)
956,692	4,016.44	3,601.49	(10.33)	4,089.42	(72.98)	(487.93)
1,396,091	2,896.64	2,597.44	(10.33)	3,202.45	(305.80)	(605.01)
325,532	2,794.00	2,505.42	(10.33)	2,664.60	129.39	(159.18)
725,064	881.73	790.66	(10.33)	1,371.49	(489.76)	(580.83)
1,232,481	1,926.98	1,727.96	(10.33)	2,048.51	(121.53)	(320.55)
1,399,776	892.10	799.97	(10.33)	1,064.10	(171.99)	(264.13)
775,184	2,888.85	2,590.51	(10.33)	2,822.90	65.95	(232.39)
363,266	2,448.20	2,195.60	(10.32)	2,846.32	(398.12)	(650.72)
680,825	3,268.53	2,931.32	(10.32)	3,668.90	(400.37)	(737.59)
905,182	3,226.51	2,893.65	(10.32)	3,650.06	(423.54)	(756.40)
1,003,891	2,445.25	2,193.14	(10.31)	2,546.06	(100.81)	(352.92)
361,388	789.41	708.02	(10.31)	1,292.56	(503.15)	(584.54)
760,071	1,062.45	952.95	(10.31)	1,604.66	(542.22)	(651.72)
200,137	2,323.97	2,084.57	(10.30)	2,324.81	(0.85)	(240.24)
624,605	3,457.09	3,101.06	(10.30)	3,877.27	(420.18)	(776.21)
749,173	4,851.73	4,352.13	(10.30)	4,932.79	(81.06)	(580.65)
296,053	2,526.09	2,266.06	(10.29)	3,100.19	(574.11)	(834.14)
1,018,516	896.10	803.88	(10.29)	1,270.20	(374.10)	(466.32)
27,493	901.97	809.16	(10.29)	1,402.39	(500.42)	(593.23)
934,188	4,164.85	3,736.64	(10.28)	4,553.74	(388.89)	(817.10)
1,129,046	3,301.59	2,962.20	(10.28)	3,420.65	(119.07)	(458.45)
352,135	3,552.35	3,187.22	(10.28)	3,588.42	(36.07)	(401.20)
20,811	786.12	705.32	(10.28)	1,641.63	(855.50)	(936.30)
921,608	1,001.10	898.21	(10.28)	1,551.39	(550.30)	(653.18)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

<u>CUSTOMERID</u>	<u>Present Bill</u>	<u>APS Proposed</u>	<u>% Increase</u>	<u>Cost of Service</u>	<u>Present - Cost</u>	<u>Proposed - Cost</u>
1,295,827	3,488.83	3,130.42	(10.27)	4,052.75	(563.92)	(922.32)
1,050,912	1,526.99	1,370.18	(10.27)	1,542.94	(15.95)	(172.76)
845,353	955.63	857.52	(10.27)	1,525.00	(569.36)	(667.48)
735,397	2,336.35	2,096.50	(10.27)	2,226.74	109.62	(130.24)
1,123,570	1,642.51	1,473.94	(10.26)	1,683.58	(41.07)	(209.63)
283,964	3,552.03	3,187.50	(10.26)	3,525.09	26.94	(337.60)
647,849	2,500.09	2,243.53	(10.26)	2,661.26	(161.17)	(417.73)
15,100	2,588.48	2,322.87	(10.26)	2,561.75	26.73	(238.87)
508,941	712.67	639.56	(10.26)	998.27	(285.61)	(358.71)
315,927	2,899.73	2,602.35	(10.26)	2,861.40	38.33	(259.05)
1,144,516	3,200.15	2,872.12	(10.25)	3,042.57	157.59	(170.45)
758,601	3,017.19	2,707.99	(10.25)	3,359.81	(342.62)	(651.82)
457,955	3,846.52	3,452.53	(10.24)	3,853.21	(6.69)	(400.68)
1,052,747	655.75	588.59	(10.24)	1,067.42	(411.67)	(478.82)
380,603	1,352.91	1,214.36	(10.24)	1,433.26	(80.35)	(218.90)
750,864	2,382.32	2,138.49	(10.23)	2,271.01	111.31	(132.51)
283,462	2,000.44	1,795.74	(10.23)	1,975.64	24.80	(179.90)
36,893	3,212.10	2,883.60	(10.23)	3,074.93	137.17	(191.33)
1,298,428	3,601.70	3,233.38	(10.23)	3,771.43	(169.72)	(538.05)
206,927	4,719.60	4,236.97	(10.23)	4,970.52	(250.92)	(733.55)
1,037,741	708.73	636.27	(10.22)	684.29	24.45	(48.01)
1,222,857	3,063.70	2,750.48	(10.22)	3,634.30	(570.59)	(883.81)
1,334,817	782.35	702.37	(10.22)	974.76	(192.41)	(272.39)
689,178	1,873.62	1,682.09	(10.22)	1,977.29	(103.67)	(295.20)
502,191	983.38	882.87	(10.22)	1,108.13	(124.74)	(225.26)
6,749	840.56	754.65	(10.22)	1,181.04	(340.48)	(426.39)
316,834	1,869.75	1,678.68	(10.22)	1,943.91	(74.16)	(265.24)
758,724	3,686.04	3,309.44	(10.22)	4,539.94	(853.90)	(1,230.50)
1,056,202	3,661.75	3,287.71	(10.21)	4,067.97	(406.21)	(780.26)
981,864	3,334.62	2,994.00	(10.21)	3,208.44	126.18	(214.44)
679,615	4,416.05	3,965.04	(10.21)	5,232.08	(816.03)	(1,267.04)
549,790	2,917.16	2,619.31	(10.21)	3,191.70	(274.54)	(572.39)
168,888	1,980.43	1,778.22	(10.21)	2,193.00	(212.57)	(414.78)
1,406,641	4,849.46	4,354.32	(10.21)	4,811.35	38.11	(457.03)
808,589	970.42	871.34	(10.21)	1,212.34	(241.92)	(341.00)
229,037	1,000.63	898.47	(10.21)	1,439.13	(438.49)	(540.66)
349,946	2,847.35	2,556.72	(10.21)	3,237.21	(389.86)	(680.49)
174,045	2,750.69	2,469.95	(10.21)	2,639.26	111.42	(169.32)
558,274	2,233.75	2,005.77	(10.21)	2,259.67	(25.92)	(253.90)
988,175	964.64	866.23	(10.20)	1,670.90	(706.26)	(804.67)
901,975	2,678.98	2,405.69	(10.20)	2,609.36	69.62	(203.66)
167,299	3,398.41	3,051.84	(10.20)	3,375.86	22.55	(324.02)
893,179	2,934.72	2,635.44	(10.20)	2,852.27	82.45	(216.84)
963,369	2,197.24	1,973.18	(10.20)	2,404.91	(207.67)	(431.73)
1,155,596	1,835.21	1,648.08	(10.20)	1,746.84	88.37	(98.76)
261,059	1,007.60	904.88	(10.20)	1,745.39	(737.79)	(840.52)
1,398,109	840.27	754.65	(10.19)	1,003.30	(163.02)	(248.65)
910,084	789.55	709.14	(10.18)	1,335.62	(546.08)	(626.48)
1,310,271	2,127.21	1,910.59	(10.18)	2,156.40	(29.19)	(245.81)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
951,980	769.30	690.96	(10.18)	1,414.98	(645.68)	(724.02)
1,197,413	3,493.57	3,137.87	(10.18)	3,384.26	109.31	(246.39)
1,281,420	9,620.98	8,641.46	(10.18)	11,356.01	(1,735.04)	(2,714.55)
853,906	2,398.96	2,154.76	(10.18)	2,412.81	(13.85)	(258.05)
378,455	3,135.78	2,816.60	(10.18)	3,607.60	(471.82)	(791.00)
571,827	4,409.62	3,960.79	(10.18)	4,931.85	(522.23)	(971.07)
1,031,847	1,977.94	1,776.63	(10.18)	2,270.89	(292.95)	(494.26)
2,099	2,149.46	1,930.71	(10.18)	2,121.20	28.26	(190.49)
450,627	3,145.84	2,825.79	(10.17)	3,034.38	111.46	(208.59)
513,592	2,228.72	2,001.99	(10.17)	2,568.52	(339.80)	(566.53)
1,199,833	872.45	783.75	(10.17)	2,037.17	(1,164.72)	(1,253.42)
677,867	831.95	747.39	(10.16)	1,117.62	(285.67)	(370.23)
425,536	1,021.35	917.55	(10.16)	1,561.34	(539.99)	(643.79)
175,200	760.02	682.81	(10.16)	776.98	(16.96)	(94.17)
1,415,469	5,109.72	4,590.63	(10.16)	5,249.95	(140.23)	(659.32)
1,289,514	3,019.62	2,712.87	(10.16)	3,261.08	(241.45)	(548.21)
590,050	2,561.08	2,300.94	(10.16)	2,666.22	(105.14)	(365.29)
867,643	951.04	854.45	(10.16)	1,563.38	(612.34)	(708.92)
949,528	1,971.46	1,771.28	(10.15)	2,233.11	(261.65)	(461.83)
719,892	4,047.91	3,636.93	(10.15)	4,318.64	(270.72)	(681.70)
437,589	2,690.54	2,417.39	(10.15)	2,656.53	34.01	(239.14)
1,162,313	5,076.14	4,560.83	(10.15)	6,066.96	(990.82)	(1,506.13)
1,080,996	2,824.83	2,538.08	(10.15)	2,912.45	(87.62)	(374.37)
844,434	2,220.53	1,995.14	(10.15)	2,566.20	(345.67)	(571.07)
673,326	844.77	759.03	(10.15)	1,634.81	(790.04)	(875.79)
561,045	2,018.45	1,813.64	(10.15)	2,179.29	(160.84)	(365.66)
923,408	1,904.65	1,711.40	(10.15)	1,871.47	33.19	(160.07)
528,640	4,535.00	4,074.90	(10.15)	4,759.32	(224.32)	(684.43)
969,875	1,005.00	903.04	(10.14)	1,080.70	(75.70)	(177.66)
525,088	2,755.90	2,476.44	(10.14)	3,034.23	(278.33)	(557.79)
671,554	4,324.83	3,886.34	(10.14)	5,237.77	(912.94)	(1,351.43)
721,993	4,839.03	4,348.43	(10.14)	4,646.81	192.22	(298.39)
882,113	596.00	535.61	(10.13)	1,016.98	(420.98)	(481.37)
1,313,940	4,164.09	3,742.27	(10.13)	4,146.79	17.30	(404.52)
362,437	2,273.17	2,042.90	(10.13)	2,284.88	(11.72)	(241.98)
485,144	1,007.78	905.69	(10.13)	1,419.03	(411.25)	(513.34)
679,363	830.08	746.00	(10.13)	1,047.85	(217.77)	(301.85)
1,274,585	2,569.03	2,309.01	(10.12)	2,720.43	(151.40)	(411.42)
555,422	990.77	890.52	(10.12)	1,531.01	(540.24)	(640.50)
810,260	3,000.40	2,696.91	(10.11)	3,011.57	(11.18)	(314.66)
1,166,149	2,676.58	2,405.93	(10.11)	2,884.73	(208.15)	(478.79)
418,630	4,878.73	4,385.57	(10.11)	4,724.02	154.71	(338.45)
94,017	3,336.21	2,998.99	(10.11)	3,647.75	(311.54)	(648.76)
494,173	868.17	780.45	(10.10)	1,660.75	(792.58)	(880.31)
602,113	2,735.91	2,459.47	(10.10)	2,701.64	34.27	(242.16)
567,780	2,713.16	2,439.05	(10.10)	3,216.24	(503.08)	(777.19)
812,760	3,580.45	3,218.71	(10.10)	3,606.61	(26.17)	(387.90)
593,869	3,802.20	3,418.09	(10.10)	3,690.54	111.66	(272.45)
684,958	4,274.34	3,842.72	(10.10)	4,664.11	(389.77)	(821.39)

**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

CUSTOMERID	Present Bill	APS Proposed	% Increase	Cost of Service	Present - Cost	Proposed - Cost
1,029,796	1,025.59	922.06	(10.09)	1,188.97	(163.38)	(266.91)
277,120	810.14	728.36	(10.09)	1,237.28	(427.14)	(508.92)
808,346	1,953.94	1,756.78	(10.09)	2,040.60	(86.66)	(283.82)
799,416	813.92	731.80	(10.09)	1,127.62	(313.71)	(395.82)
1,227,369	1,000.78	899.85	(10.09)	1,775.89	(775.10)	(876.04)
758,379	994.71	894.41	(10.08)	1,386.27	(391.56)	(491.86)
8,490	2,532.31	2,277.03	(10.08)	2,485.37	46.94	(208.34)
578,022	3,051.20	2,743.63	(10.08)	3,396.02	(344.82)	(652.39)
26,186	4,859.47	4,369.63	(10.08)	5,053.54	(194.07)	(683.91)
145,346	737.90	663.53	(10.08)	1,321.98	(584.07)	(658.44)
1,018,812	3,272.98	2,943.13	(10.08)	3,199.12	73.86	(255.99)
325,196	2,299.19	2,067.49	(10.08)	2,278.12	21.07	(210.63)
775,158	3,416.06	3,071.87	(10.08)	3,843.78	(427.71)	(771.91)
735,919	3,215.92	2,891.89	(10.08)	3,899.55	(683.63)	(1,007.66)
1,214,884	3,305.17	2,972.19	(10.07)	3,235.65	69.52	(263.46)
1,253,770	964.56	867.43	(10.07)	1,290.70	(326.14)	(423.27)
761,661	3,095.78	2,784.11	(10.07)	3,441.27	(345.49)	(657.17)
240,967	1,025.56	922.31	(10.07)	1,356.88	(331.32)	(434.57)
554,084	2,522.22	2,268.32	(10.07)	2,451.56	70.66	(183.24)
343,440	958.99	862.51	(10.06)	1,429.90	(470.91)	(567.39)
303,554	2,184.15	1,964.42	(10.06)	2,140.87	43.28	(176.45)
1,415,645	4,660.63	4,191.93	(10.06)	5,036.95	(376.31)	(845.01)
1,402,089	7,893.64	7,099.87	(10.06)	7,828.25	65.38	(728.39)
951,480	688.82	619.56	(10.05)	702.68	(13.86)	(83.12)
473,567	843.12	758.36	(10.05)	1,355.25	(512.14)	(596.90)
1,134,927	2,937.79	2,642.45	(10.05)	2,975.93	(38.14)	(333.48)
986,905	990.39	890.83	(10.05)	1,816.33	(825.94)	(925.50)
1,064,933	3,595.71	3,234.33	(10.05)	3,923.41	(327.70)	(689.09)
999,532	3,030.90	2,726.31	(10.05)	3,512.66	(481.76)	(786.36)
808,252	2,756.33	2,479.33	(10.05)	2,874.17	(117.84)	(394.84)
430,903	3,373.44	3,034.52	(10.05)	3,360.95	12.49	(326.43)
909,146	1,056.43	950.31	(10.05)	1,538.23	(481.80)	(587.92)
478,060	905.74	814.76	(10.04)	1,440.50	(534.76)	(625.74)
345,128	3,247.65	2,921.44	(10.04)	3,284.62	(36.97)	(363.18)
494,842	1,005.34	904.39	(10.04)	1,761.50	(756.16)	(857.11)
378,215	3,535.20	3,180.32	(10.04)	3,878.40	(343.20)	(698.08)
640,483	4,474.50	4,025.37	(10.04)	4,660.75	(186.25)	(635.38)
1,104,134	2,490.77	2,240.79	(10.04)	2,614.17	(123.41)	(373.39)
1,155,132	2,632.68	2,368.61	(10.03)	2,752.14	(119.46)	(383.54)
473,192	4,231.04	3,806.66	(10.03)	4,258.29	(27.25)	(451.63)
471,498	1,020.72	918.35	(10.03)	1,565.75	(545.03)	(647.40)
39,036	860.58	774.28	(10.03)	1,825.64	(965.06)	(1,051.36)
533,188	977.70	879.66	(10.03)	1,354.48	(376.78)	(474.82)
790,870	4,707.53	4,235.50	(10.03)	4,791.84	(84.32)	(556.35)
184,456	2,668.60	2,401.04	(10.03)	2,944.69	(276.09)	(543.66)
904,785	828.74	745.68	(10.02)	1,352.85	(524.11)	(607.17)
379,602	2,868.77	2,581.27	(10.02)	2,972.00	(103.23)	(390.73)
183,997	4,057.52	3,651.03	(10.02)	4,052.30	5.22	(401.28)
815,212	3,095.73	2,785.63	(10.02)	3,230.21	(134.48)	(444.58)



**Customers with Annual Bill Decrease of At Least 10% Moving Away from Cost of Service**

<u>CUSTOMERID</u>	<u>Present Bill</u>	<u>APS Proposed</u>	<u>% Increase</u>	<u>Cost of Service</u>	<u>Present - Cost</u>	<u>Proposed - Cost</u>
382,765	863.35	776.87	(10.02)	1,439.99	(576.64)	(663.12)
1,329,298	2,634.41	2,370.54	(10.02)	2,597.31	37.10	(226.78)
996,492	4,959.00	4,462.35	(10.02)	5,050.95	(91.95)	(588.59)
652,151	727.73	654.86	(10.01)	1,204.44	(476.72)	(549.59)
883,176	967.09	870.26	(10.01)	1,610.85	(643.75)	(740.59)
561,246	6,352.05	5,716.29	(10.01)	6,595.15	(243.10)	(878.86)
640,181	1,031.22	928.02	(10.01)	1,739.80	(708.59)	(811.78)
528,760	1,040.98	936.83	(10.01)	1,657.70	(616.72)	(720.87)
239,014	3,746.67	3,372.08	(10.00)	3,655.03	91.65	(282.95)
766,644	2,483.33	2,235.09	(10.00)	2,530.92	(47.59)	(295.83)
1,180,337	2,263.38	2,037.15	(10.00)	2,446.39	(183.02)	(409.24)